

South African Medical Journal
Suid-Afrikaanse Tydskrif vir Geneeskunde
P.O. Box 643, Cape Town Posbus 643, Kaapstad

Cape Town, 31 March 1956
 Weekly 2s. 6d.

Vol. 30 No. 13

Kaapstad, 31 Maart 1956
 Weekliks 2s. 6d.

CONTENTS — INHOUD

Adrenal Steroid Hormone Therapy in Malignant Exophthalmos. P. Leftwich, B.Sc., M.R.C.P. (Lond.)	309	A Plea for Maternal Services in South Africa with Particular Reference to the Rural Areas. J. C. Coetzee, M.A., M.A.O., L.M. (Rotunda), F.R.C.O.G.	323
26th Council Session of the World Medical Association	310	5. African Medical and Dental Council	325
Editorial: Van die Redaksie		Opening of Red Cross War Memorial Children's Hospital	325
Journals of Medicine	311	In Memoriam: Cornelius Michael Rautenbach	326
Mediese Tydskrifte	311	New Preparations and Appliances: Nuwe Preparate en Toestelle	326
The Place of Thrombendarterectomy in Vascular Surgery. M. A. Lautré, F.R.C.S. (Eng.)	313	Poliomyelitis in the Union: Statement by Minister of Health	326
International Cancer Congress	315	Official Announcement: Amptelike Aankondiging: Medical Aid Societies: Mediese Hulpverenigings	327
Lamellar Scleral Resection — An Operation for Retinal Detachment. L. Staz, M.B., B.Ch. (Dubl.), D.O.M.S. (R.C.P. & S. Eng.)	316	Refresher Courses for General Practitioners: Opknappingskursusse vir Algemene Praktisyne	327
Experiences with a Mobile Buried Implant after Enucleation. A. I. Friedman, M.B., B.Ch. (Rand), D.O.M.S., (R.C.P. & S. Eng.) and J. Graham Scott, M.D. (Glasg.), D.O.M.S. (R.C.P. & S. Eng.)	319	Registration of Specialities	327
Ether: A Vindication. C. H. H. Coetzee, M.B., Ch.B. (Edin.)	322	Passing Events: In die Verbygaan	328
		Reviews of Books: Boekresensies	329
		Correspondence: Briewerubriek	331

DURABLE ANTISEPSIS

AN ANTISEPTIC for surgical, medical and obstetric practice should not be too selective. It is well that it should be lethal to a diversity of common pathogenic organisms, such as Streptococcus pyogenes and Staphylococcus aureus; better if it can also be depended upon in the presence of blood, pus and wound debris. Best of all if the barrier it creates against fresh contamination be

lasting. Except in the event of gross contamination, a film of 30% 'Dettol' dried on the skin, confers protection against infection by Streptococcus pyogenes for at least two hours.*

** This experimental finding (F. Obstet. Gynaec. Brit. Emp. Vol. 40. No. 6) has been confirmed in obstetric practice.*

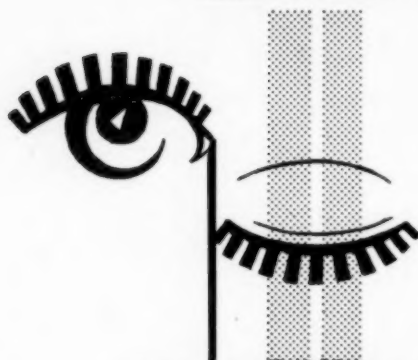
DETTOL

THE MODERN ANTISEPTIC

RECKITT & COLMAN (AFRICA) LTD., P.O. BOX 1097, CAPE TOWN

Please Support Our Advertisers — Ondersteun Asseblief Ons Adverteerders

PHENOBARBITONE SODIUM • PETERSEN



SOPENTAL

— is indicated —

INSOMNIA. In those cases of insomnia where the patient experiences difficulty in getting off to sleep, SOPENTAL has an advantage over other barbiturates, since its short action is less likely to leave the patient in a state of depression during the morning following administration. The normal dosage employed is one or two tablets (in the average patient one tablet is sufficient) immediately before retiring.

PREOPERATIVE TREATMENT. SOPENTAL may be used as a basal anaesthetic prior to surgical operation, its sedative effect minimising the amount of general anaesthetic required. In these cases the normal procedure is one tablet the evening before operation, a further tablet two hours before, and, if necessary, a third tablet one hour before operation.

OBSTETRICS. SOPENTAL may be employed for the production of obstetrical amnesia, where the optimum dose is that which reduces pain without depressing uterine contractions. Here it is usual to start with one tablet at the commencement of labour, repeating the dose, when necessary, up to a maximum of five tablets.

ACTION AND USES: SOPENTAL is one of the more rapidly acting barbiturates, but its duration of action is short.

SOPENTAL is the mono-sodium derivative of 5-ethyl-5-(1-methylbutyl)-barbituric acid.

SOPENTAL is almost completely destroyed by the liver, and is therefore useful in cases of impaired renal function.

SOPENTAL is issued as tablets of Pentobarbitone Sodium $1\frac{1}{2}$ grains in each, in bottles of 40 and 500.

Manufactured in South Africa by



Established 1842

CAPE TOWN DURBAN SALISBURY JOHANNESBURG
P.O. Box 38 113, Umbilo Road P.O. Box 2238 P.O. Box 5785

BULAWAYO BLOEMFONTEIN
P.O. Box 1200 P.O. Box 1005

P.44

Virol

FOR INFANTS, CHILDREN
AND INVALIDS

VIROL is a concentrated and scientifically blended supplementary food of high nutritional value; it is designed to provide, in just the right proportions, those specific nutrients most likely to be needed to balance the rest of the diet.

VIROL contains: malt extract; refined beef fat; maltose; cane sugar; malto-dextrins; glucose; fructose; egg; orange juice; salt; flavourings; phosphoric acid; calcium phosphate; iron phosphate; sodium iodide; and vitamins as follows:—

Vitamin A, 1500 i.u.; Vitamin B₁, 0.4 mg.; Nicotinic Acid, 4.5 mg.; Vitamin D, 1000 i.u.; also Iodine, 75 micro-g.; Iron 8 mg.; all per ounce.

VIROL is the food for building up strength and vitality—so essential after illness or operation.

POST GRADUATE STUDY

For South African Practitioners

Are you preparing for any Medical, or surgical Examination?

Send Coupon below for valuable publication

"GUIDE TO MEDICAL EXAMINATIONS"

PRINCIPAL CONTENTS

The F.R.C.S. England, Edinburgh and Ireland
The M.R.C.P. London, Edinburgh and Ireland
Diploma in Anaesthetics
The Diploma in Tropical Medicine
Diploma in Ophthalmology
Diploma in Psychological Medicine
Diploma in Child Health
Diploma in Physical Medicine
Diploma in Public Health
Diploma in Pathology
The F. D. S. and all dental degrees and diplomas (in Dental Guide)

You can prepare for any of these qualifications by postal study at home and come to Great Britain for examination. We specialize in Post-graduate tuition.

THE SECRETARY
MEDICAL
CORRESPONDENCE
COLLEGE

19 Welbeck Street,
London, W.1.

Sir,—Please send me a copy of your "Guide to Medical Examinations" by return.

Name

Address

Examinations in which interested

Cape Town
W

ADRI

In most degree of 'staring eye by opening occurs interest without increasing recognition types, point of Where I clinician for treatment thyroid no hypno complica

The a better volume deposits eyeball cases su oedema (chemos opthal infiltrat partial opthal patient' the bon eye unit Radi advocat been co pituitary Chan

South African Medical Journal

Suid-Afrikaanse Tydskrif vir Geneeskunde

P.O. Box 643, Cape Town

Posbus 643, Kaapstad

Cape Town, 31 March 1956
Weekly 2s. 6d.

Vol. 30 No. 13

Kaapstad, 31 Maart 1956
Weekliks 2s. 6d.

ADRENAL STEROID HORMONE THERAPY IN MALIGNANT EXOPHTHALMOS

REPORT OF A CASE

P. LEFTWICH, B.Sc., M.R.C.P. (Lond.)

Cape Town

In most cases of Graves's disease there is hardly any degree of true proptosis of the globe of the eye. The 'staring look' is due mainly to exposure of the white of the eye by lid retraction and widening of the palpebral opening. Occasionally, however, malignant proptosis occurs in patients with the disease. In recent years interest in a similar syndrome, malignant exophthalmos without hyperthyroidism, has been aroused and increasing awareness of its features has led to more frequent recognition of cases. In both hyperthyroid and euthyroid types, protrusion of the globe may become severe to the point of serious damage or even total loss of the eye. Where hyperthyroidism accompanies exophthalmos, the clinician is faced with the dilemma that 2 conditions call for treatment, the thyrotoxic state and the eyes, and that treatment of the former by surgical methods or anti-thyroid drugs may aggravate the exophthalmos. When no hyperthyroidism is present the problem is less complicated.

The anatomical changes that occur in exophthalmos are better understood than their cause. An increase in the volume of the retro-ocular orbital contents, mainly due to deposits of fat at first and later fibrous tissue, push the eyeball forward towards the bony ring of the orbit. In cases sufficiently severe to merit the term malignant, oedema of the lids and of the bulbar conjunctivae (chemosis) and in rare cases papilloedema may precede an ophthalmitis and loss of the eye. Oedema and round-cell infiltration of the external ocular muscles may cause partial paralysis of movement of the eye (exophthalmic ophthalmoplegia) and the resultant diplopia increase the patient's discomfort. Tarsorrhaphy or decompression of the bony orbit may be necessary to relieve tension in the eye until natural remission of the disease occurs.

Radiation of the pituitary gland and the orbit has been advocated as a form of treatment, but the results have not been convincingly successful. Its rationale rests on the pituitary theory of causation of exophthalmos.

Chandler and Hartfall (1952) reviewed the experimental

and theoretical considerations that pointed to the part played by the anterior pituitary gland in the causation of exophthalmos. This is not clearly understood but it is generally believed that there is a relationship between the thyroid stimulating hormone of the pituitary gland (TSH) and an unknown substance in it that influences the onset of exophthalmos. It is known that continued administration of corticotropin or cortisone reduces TSH secretion and hence depresses thyroid function through an inhibiting effect on the pituitary. On this basis Chandler and Hartfall made a trial of cortisone and ACTH in cases of exophthalmic ophthalmoplegia and reported favourable results with and without hyperthyroidism both as regards exophthalmos and thyroid function. Later reports showed that results were variable—Campbell (1952), Kinsell *et al.* (1953), M.R.C. report (1955)—but in the last-mentioned report it was considered that absence of benefit in the cases treated might be due to inadequate and insufficiently prolonged dosage and that further trials should be made.

In a small proportion of cases of euthyroid malignant exophthalmos, a true thyrotoxic state ensues after months or years. That is, eye signs precede the full picture of Graves's disease. But the majority never develop this condition and from the description of cases in the literature, a natural remission occurs over a period of a year or two. Treatment that would tide the patient over the acute phase until a natural cure takes place, without recourse to operation, would be the ideal to aim at.

The strikingly favourable effect of treatment by means of high and prolonged dosage of steroid hormones is illustrated in the following report of the medical history of a patient suffering from unilateral malignant exophthalmos without hyperthyroidism.

CASE REPORT

A business man, L.H., had an attack of virus pneumonitis in September 1954. Shortly after recovery he noticed pain in the left cheek that was at first attributed to dental root sepsis. After a

few days, swelling of the lids of the left eye was noticeable. Discomfort around the eye continued and double vision appeared. The possibility of antral sepsis or even malignant tumour of orbit or antrum was raised. While on a visit to Durban in January 1955 he was seen by Dr. N. Shapiro, who established the diagnosis of exophthalmic ophthalmoplegia. He came under my care in February 1955. There was slight protrusion of the right eyeball, insufficient to cause symptoms, and the major disability affected the left eye. This showed the characteristic triad of marked proptosis, severe oedema of the lids, and chemosis. The globe was 'cemented in' giving an impression of stony hardness. There was lid-lag and partial paresis of extrinsic muscles with diplopia to upward and downward movements, sufficiently severe to necessitate the use of a blacked-out glass. The thyroid gland was unenlarged and there was no clinical or laboratory evidence of thyrotoxicosis. In other respects the patient's health was good and his blood pressure was within normal range.

Treatment with 200 mg. of cortisone daily had been started in Durban and 4 days later I increased this to 350 mg. daily, together with potassium chloride and reduced sodium chloride intake; and this dosage was continued for 4 weeks. There had been gradual improvement on treatment; diplopia had almost disappeared and oedema and chemosis were much less, but there was little apparent change in the degree of proptosis. The patient was now barely conscious of discomfort around the eye. Withdrawal of the drug to 100 mg. daily was carried out, but after a few days recurrence of alarming chemosis and oedema occurred. In view of the possibility of serious side-effects of the hormone, the question of decompression operation was raised, but the patient refused this and preferred the risks entailed in medical treatment. Dosage was increased to 300 mg. daily with dramatic improvement within 12 hours. Several further attempts in the next 2 months to reduce the dosage from 300 mg. daily had similar sequelae, and it was possible to produce and abolish the acute signs almost at will, by reduction and increase of the daily dose. It was clear that excellent control could be achieved by adequate amounts of cortisone. Weight and blood pressure had remained unchanged, but mental depression, agitation and restlessness, and acneiform rash and a tendency to 'moon face' had appeared. Prednisone (metacortandracin), the dehydrogenated derivative of cortisone, had become available and in the hope that troublesome side-effects might be lessened, a change to the newer hormone was made. Substitution of this for cortisone was achieved without difficulty in the dosage of 50 mg. daily (approximately equivalent to 200-250 mg. cortisone). Mental depression became less severe, but the rash was unchanged and the patient complained

of a mild dyspepsia, possibly (in the light of subsequent reports) due to a relatively silent peptic ulcer. By August 1955 he was taking a maintenance dose of 20 mg. of prednisone daily and was leading an active business life. Proptosis was only slight and there was no oedema or chemosis. He was barely conscious of discomfort in the eye, but complained of fatigue and some lack of alertness. On 2 occasions attempts to reduce daily dosage led, as with cortisone, to further relapses of chemosis and oedema and he was compelled to return to the full maintenance dose. In October 1955 he made a final effort to reduce dosage and over a period of a week was able to withdraw it completely. One month later, some 14 months after the commencement of the illness, there was slight proptosis, no oedema or chemosis and the rash was less noticeable. He was feeling in good health and was active, cheerful and energetic and the condition appeared to have undergone a remission.

SUMMARY

The clinical effects of treatment of a patient suffering from unilateral malignant exophthalmos by means of cortisone and prednisone, as an alternative to radiotherapy to the pituitary gland or decompression of the orbit, showed that in this case results were highly satisfactory, provided that the hormones were administered in high dosage over a prolonged period. Improvement occurred only after several months of treatment. Efforts to reduce dosage to a maintenance level during the first 6 months led to recurrence of severe exophthalmos within a few days.

Unfavourable side-effects were severe, but fortunately only temporary. Adequate control of the disease was possible until a natural remission occurred 16 months after the onset.

REFERENCES

- Chandler, G. N. and Hartfall, S. J. (1952): *Lancet*, **1**, 847.
Campbell, D. A. (1952): *Trans. Ophthal. Soc. U.K.*, **72**, 457.
Kinsell, L. W., Partridge, J. W. and Foreman, N. (1953): *Ann. Intern. Med.*, **38**, 913.
Report of therapeutic trial of cortisone and ACTH by panel appointed by Medical Research Council (1955): *Lancet* **1**, 6.

26TH COUNCIL SESSION OF THE WORLD MEDICAL ASSOCIATION

The council of the World Medical Association will be convened in its 26th session in Cologne, Germany, from 29 April to 5 May 1956.

The council, composed of the officers, officials and 11 members of the General Assembly elected for 3-year terms to represent the 5 regional areas of the world is the executive and administrative body of the World Medical Association. It meets 3 times each year and devotes its annual spring session to implementing the actions taken at the last annual General Assembly and preparing for the forthcoming General Assembly, which will be held in Havana, Cuba, on 9-15 October 1956.

The items on the agenda of the 26th Council Session which will receive detailed consideration include:

Receiving and studying the detailed reports of the Education Committees of the National Member Associations on the proceedings of the First World Conference on Medical Education (held in London in 1953).

Establishing the programme for the 2nd World Conference on Medical Education scheduled to be held in Chicago, Illinois (USA), the last week in August 1959. The theme of the 2nd Conference will be Postgraduate Medical Education. The American Medical

Association will be host to this conference. Collaborating with the World Medical Association in organizing the conference are the World Health Organization; the International Association of Universities and the Committee for International Organization of Medical Sciences (CIOMS).

Considering the establishment of a universally recognized emblem for the protection of civilian doctors in peace and war. Planning a world wide programme to establish the recognition of this emblem by the medical profession and governments of all nations of the world to assure the utmost protection of the Medical Services to Civilians, especially in time of national or international conflict. The International committee of the Red Cross is assisting and cooperating in this undertaking.

Continued study of the problems involved in the establishment of an International Medical Law.

Planning the implementation of programmes for (a) international exchange opportunities in medical education, (b) assistance to the medical profession in under-developed countries, and (c) development of a central repository for medical credentials.

The German Medical Association will be the host at this Council Session.

Die me
krates.
die 17de
mediese
in die v
publisee
voorbee
aanpassi
Die e
die verv
die wete
ceeu in
Rome, I
is medie
17de eeu
Transac
verenigi
gebring
in die
Vroeë v
and Obs
Edinbur
(1768-18
London,
delphia
delinge
dateer v
op alle
tale gep
van die
jaarlikse
amptes
and cha
1645-56
Algen
veral te
lande b
in 1779

31 Mar

South African Medical Journal

Suid-Afrikaanse Tydskrif vir Geneeskunde

VAN DIE REDAKSIE

MEDIESE TYDSKRIFTE

Die mediese literatuur is so oud, en ouer, as Hippokrates. Voor die nuusblad vir die eerste keer gedurende die 17de eeu sy verskyning in Europa gemaak het, is mediese geskrifte, net soos ander wetenskaplike werke, in die vorm van aparte verhandelinge of essays gepubliseer: Harvey se *De motu cordis* van 1628 is 'n voorbeeld. Die vroeë mediese tydskrifte was bloot aanpassings van die nuusblaadjies van hul tyd.¹

Die eerste gereelde soort wetenskaplike tydskrif was die vervolgpublikasie van die verrigtinge of *acta* van die wetenskaplike verenigings wat gedurende die 17de eeu in verskeie Europese lande gestig is—in 1603 te Rome, 1635 te Parys, in 1660 te Londen, ens. So ook is mediese navorsing sedert die tweede helfte van die 17de eeu in die *Royal Society of London se Philosophical Transactions* gepubliseer. Gedurende die 18de eeu is verenigings van suiwer geneeskundige aard tot stand gebring, en hulle verrigtinge was 'n belangrike mylpaal in die ontwikkeling van die mediese joernalistiek. Vroeë voorbeelde op Engels was die *Medical Essays and Observations* (1733-44) wat deur 'n vereniging in Edinburg uitgegee was; die *Medical Transactions* (1768-1820) van die *Royal College of Physicians of London*, en sedert 1793, die *Transactions of the Philadelphia College of Physicians*—gepubliseerde verhandelinge gerig aan die *Massachusetts Medical Society* dateer vanaf 1719. 'n Groot aantal verrigtinge en *acta* op alle mediese gebiede word vandag nog in verskeie tale gepubliseer, en baie van hulle is nouliks te onderskei van die gewone geneeskundige tydskrif. Gelykstaande aan die verrigtinge van verenigings is die gewoonlik jaarlikse verslae van hospitale, publieke mediese beamptes ens., waarvan die *True report of the great costs and changes of the five hospitals in the City of London*, 1645-56¹ die vroegste Engelse voorloper was.

Algemene geneeskundige tydskrifte het gedurende en veral teen die einde van die 18de eeu in verskillende lande begin. Op Engels is sulke tydskrifte byvoorbeeld in 1779 in Londen gestig, in 1796 in Edinburg,

EDITORIAL

JOURNALS OF MEDICINE

Medical literature has been written since the days of Hippocrates and earlier. Before the news-sheet first appeared in Europe in the 17th century medical writings, like other scientific works, were published in the form of separate treatises or essays (e.g. Harvey's *De motu cordis* of 1628). The earlier medical periodicals were merely adaptations of the contemporary news-sheet.¹

The first type of regular scientific periodical was the serial publication of the transactions or *acta* of the scientific societies which were formed in the different countries of Europe during the 17th century (Rome 1603, Paris 1635, London 1660, etc.). Thus, from the late 17th century medical researches were reported in the *Philosophical Transactions* of the Royal Society of London. Strictly medical societies were formed during the 18th century and their transactions mark an important stage in the development of journals of medicine. Early examples in the English language are the *Medical Essays and Observations* (1733-44) issued by a society in Edinburgh, the *Medical Transactions* (1768-1820) of the Royal College of Physicians of London, and the *Transactions of the Philadelphia College of Physicians* from 1793 onwards (published papers communicated to the Massachusetts Medical Society date back to 1719). A great number of transactions and *acta* in all branches of medicine are still published in many languages, many of them indistinguishable from the ordinary general medical journal. Parallel with the transactions of societies are the reports (usually annual) of hospitals, public medical officers, etc., of which the earliest English forerunner was the *True report of the great costs and changes of the five hospitals in the City of London*, 1645-56.¹

The general medical journals grew up in different countries during the 18th century, mainly towards its close. In English such journals were, for example, started in London in 1779 and 1791, in Edinburgh in 1796, and after the turn of the century in Ireland and America. These attained their full growth with such famous

en aan die begin van die volgende eeu in Ierland en Amerika. „Hierdie (tydskrifte) het tot volle wasdom gekom met beroemde name soos *The Lancet* (1823)—die oudste Engelse mediese Tydskrif wat tot vandag nog ononderbroke uitgegee word.’ Op die hakke van *The Lancet* volg die *Glasgow Medical Journal* (1828), wat ook nog in omloop is. Die *Dublin Medical Press* * wat in 1839 gestig is, het in 1860 saamgesmelt met die *Medical Circular* (’n Londense tydskrif gestig in 1852), en het tot vandag bly voortbestaan as die *Medical Press and Circular* van Londen.²

Die lys van algemene mediese tydskrifte is veral sedert die einde van die 19de eeu vermenigvuldig deur die gedurige verskyning van nuwe spesialiteit-tydskrifte. Vandag word die meeste mediese tydskrifte, met Engels as voertaal, in die VSA gepubliseer. Sommige van die Amerikaanse tydskrifte op algemene geneeskunde is vroeg in die 19de eeu gebore; onder die wat nog altyd in omloop is, is die *New England Journal of Medicine* (Boston, 1812), en die *American Journal of Medical Sciences* (Philadelphia, 1827).

Die *British Medical Journal* is in 1857 gestig—34 jaar na *The Lancet* en 11 jaar voor die *Practitioner*. Die *Journal of the American Medical Association* het 26 jaar later, in 1883, begin. Hoewel hierdie twee tydskrifte die mondstukke van nasionale mediese verenigings is, behoort hulle nogtans by die klas van algemene mediese blaie.¹

In ander dele van die wêreld is mediese blaie met Engels as voertaal eers later gestig, hoewel die *Australian Medical Journal* wat later met die *Medical Journal of Australia* saamgesmelt het, al in 1856 gestig is. Dit is interessant om daarop te let dat die Engelse taal vandag baie in geneeskundige tydskrifte in sekere dele van die Europese Vasteland, byvoorbeeld in die Skandinawiese lande, gebruik word.

Die eerste bekende onderneming in die mediese joernalistiek in Suid-Afrika was die kortstondige *Cape Town Medical Gazette*,³ wat in 1847 as ’n kwartaalblad begin is. Dit was onder die redaksie van dr. H. A. Ebdon, wat 2 jaar tevore van Skotland gekom het en later plaaslik goed bekend geword het. Hy was voorsitter van die ‘Supreme Medical Committee’ van die Kolonie. Dr. F. le S. Fleck, dr. L. Pappe en dr. H. Bickersteth was drie van die gereëde bydraers. Die interessantste artikels in hierdie tydskrif is twee kommentare van die Redaksie op die gebruik in 1847 in Kaapstad van swael-eter as verdowingsmiddel. Hierdie tydskrif het ’n in kortstondige lewe gehad, en ’n tydperk van amper 40 jaar het daarna verstryk voordat daar enige verdere ontwikkeling in die mediese joernalistiek in Suid-Afrika plaasgevind het.

1. Lefanu, W. R. (1938): *British Periodicals of Medicine*. Baltimore: The Johns Hopkins Press.
2. Rowlette, R. J. (1939): *The Medical Press and Circular 1839-1939*. London: Medical Press and Circular.
3. Burrows, E. H. (1954): S. Afr. T. Geneesk., 28, 528.

* Die stigter en eerste redakteur van die *Dublin Medical Press* was dr. Arthur Jacob, wat as redakteur opgevolg is deur sy seun, dr. A. Hamilton Jacob. Hulle was die oorgrootvader en grootvader van dr. H. Hamilton Jacob, wat nou in Kaapstad praktiseer.

names as *The Lancet* (1823)—the oldest English medical journal still running in unbroken series’, which was closely followed by the *Glasgow Medical Journal* (1828), also still running.¹ The *Dublin Medical Press*,* which was founded in 1839, joined up in 1860 with the *Medical Circular*, a London journal founded in 1852, to carry on as the *Medical Press and Circular*, which is still published in London.²

The list of general medical journals has been multiplied by the constant production of new specialist journals, more since the close of the 19th century. The majority of medical journals in the English language today are published in the USA. Some of the American general medical journals started early in the 19th century; amongst those still in publication are the *New England Journal of Medicine* (Boston, 1812) and the *American Journal of Medical Sciences* (Philadelphia, 1827).

The *British Medical Journal* was established in 1857 (34 years after the *Lancet* and 11 years before the *Practitioner*) and the *Journal of the American Medical Association* began 26 years later, in 1883. These two journals, though organs of national medical associations, belong in fact to the class of general medical journals.¹

Medical journals in English in other parts of the world grew up later, though the *Australian Medical Journal*, now merged in the *Medical Journal of Australia*, began as early as 1856. It is interesting to note that English is used a good deal today in medical publications in certain countries of the Continent of Europe, e.g. the Scandinavian countries.

The earliest known venture in medical journalism in South Africa was the short-lived *Cape Town Medical Gazette*,³ which was issued as a quarterly in 1847. It was edited by Dr. H. A. Ebdon, who had come from Scotland 2 years earlier and afterwards became well known locally and was chairman of the ‘Supreme Medical Committee’ of the Colony. Three regular contributors were Dr. F. le S. Fleck, Dr. L. Pappe and Dr. H. Bickersteth. The most interesting articles in this journal are two editorial commentaries upon the earliest use of sulphuric ether as an anaesthetic in Cape Town in 1847.³ This journal ran for a short time only, after which a period of nearly 40 years elapsed before any further development of medical journalism took place in South Africa.

1. Lefanu, W. R. (1938): *British Periodicals of Medicine*. Baltimore: The Johns Hopkins Press.
2. Rowlette, R. J. (1939): *The Medical Press and Circular 1839-1939*. London: Medical Press and Circular.
3. Burrows, E. H. (1954): S. Afr. Med. J., 28, 528.

* The founder and first editor of the *Dublin Medical Press* was Dr. Arthur Jacob, who was succeeded as editor by his son Dr. A. Hamilton Jacob. These were the great-grandfather and grandfather of Dr. H. Hamilton Jacob, now a Cape Town physician.

Pathology that, an arteriosclerotic group in may remain prolonged, rarely or advent the time had long opening Santos' operative following subject and Ba notably Repe increase last dec interest usually slowly latent c ischaemic reduction the narrow is slow increase in the complete nearest placed segment artery length the pro when in the ves latent occlusion signs, v occlusion hand b accom gangren

Signs a

The fatigue pedal

* A Pretoria

THE PLACE OF THROMBENDARTERECTOMY IN VASCULAR SURGERY*

M. A. LAUTRE, F.R.C.S. (ENG.)

Johannesburg

Pathologists have for many years been aware of the fact that, among the many protean manifestations of arteriosclerosis in the human body, there exists a small group in which narrowing of the calibre of the vessels may remain limited to certain of the larger arteries for prolonged periods without appreciable changes necessarily occurring in the rest of the vascular tree. The advent of arteriography in 1946, brought this entity into the limelight and renewed in the minds of surgeons what had long been a tantalizing prospect—the possibility of opening out these blocked or narrowed segments. Dos Santos¹ was the first to achieve this in 1947 by the operation now known as thrombendarterectomy. Following him invaluable work was carried out on this subject in Europe by men such as Le Riche², Lemaire³ and Bazy⁴ and later by several surgeons in America, notably Wylie.⁵

Repeated arteriographic studies, coupled with an increasing number of operative findings during the last decade, has brought to light some important and interesting facts. Occlusion in the aorto-iliac zone usually begins as a localized area of intimal thickening, slowly encroaching on the arterial lumen and remaining latent clinically for many years. Wylie, has shown that ischaemic signs, at rest, are not produced until there is a reduction of 90% of the arterial lumen. As a result of the narrowing, an increasingly good collateral circulation is slowly brought into being. Narrowing continues to increase until the stage arrives when coagulation occurs in the lee of the stenosis—leading sooner or later to complete occlusion. Coagulation then extends to the nearest large arterial branch and as the branches are placed in close proximity in this area, the occluded segment is of necessity a limited one. In the femoral artery the same process probably occurs over a greater length of artery; as there are no large branches between the profunda and the popliteal bifurcation, the occlusion when it comes about extends down a long segment of the vessel. Aorto-iliac stenosis therefore tends to be latent and often remains undiagnosed, and complete occlusion when it occurs may be accompanied by minimal signs, with usually no tissue decay provided there are not occlusions elsewhere. Femoral stenosis on the other hand becomes clinically manifest earlier, and is often accompanied by marked ischaemic changes, going on to gangrene when the occlusion becomes complete.

Signs and Symptoms

The classical Le Riche syndrome—prone to fatigue, global wasting, impotence, pallor, absence of pedal pulses and trophic changes—is rarely seen in its

entirety. Thus palpable, if weak, femoral and pedal pulses are present in a large proportion of cases (15 and 9 respectively out of 18 cases in Wylie's series⁶). A noteworthy feature is the frequency of a systolic bruit at the inguinal ligament. Femoral obstruction invariably presents the picture of lower-leg claudication with absent pulses, colour changes and trophic lesions—depending upon the extent and completeness of the occlusion.

The Operation

Of paramount importance is an exposure wide enough to enable the surgeon to dissect the artery free and clamp it well above and below the occlusion, bearing in mind the fact that the intimal changes often extend considerably beyond the limits indicated by aortography. The artery is opened longitudinally and the thickened intima incised at the lower limit of the lesion; the dissection is then carried proximally to its upper limit and the 'sequester' thus shelled out—a step which is usually carried out without much difficulty once the right plane of cleavage within the media is entered, except at the upper limit where careful sharp dissection is called for. The incision in the artery is then closed in the usual manner. Regional heparinization in the proximal and distal segments is maintained throughout.

Secondary thrombosis at the operation site has always been the biggest obstacle to contend with. In the early series the percentage was considerable, despite various forms of anti-coagulant therapy—even to the extent of the regional administration of heparin post-operatively by means of an indwelling polythene tube. In his last series, however, Wylie relies entirely on systemic heparin extending over the operative period only⁷; no thrombosis occurred in 62 cases. Another factor that has brought down the incidence of this complication is meticulous care to avoid leaving any intimal irregularity on which fresh clotting might occur; this applies particularly to the lower end of the 'filleting', where a thickened shoulder may lead to distal stripping of the intima by the blood-stream.

Dehiscence of the arterial suture-line with sudden haemorrhage (or aneurysm formation) is the other main problem. Although the incidence is small it must always remain an appreciable risk, unless reinforcing methods such as envelopes of fascia lata are employed for thin-walled vessels. It is disturbing to realize that this catastrophic event may occur up to 4 weeks after operation.

Both of these complications, however, apply to the same extent in the alternative method of treating these obliterative lesions, i.e. the replacement of the obstructed segment by cloth or homografts. As grafting is a much more formidable procedure it would appear that thrombendarterectomy for aorto-iliac obstruction will be used to an increasing extent. The position is not so assured with the lower vessels—

* A paper presented at the South African Medical Congress, Pretoria, October 1955.

external iliac and femoral. Although several surgeons^{7, 8} claim a fair percentage of good results, the incidence of secondary thrombosis remains high—possibly owing to the fact that these lesions are usually associated with more diffuse changes. It is possible that with a careful selection of cases and more intensive anti-coagulation therapy these vessels will prove more amenable to endarterectomy than grafting—the figures for which are admittedly poor.

Lumbar ganglionectomy, carried out either before or concurrently with thrombendarterectomy, is being increasingly used on the grounds that the increased rate of blood-flow thereby produced will tend to limit thrombosis, and that post-operative vasospasm will be averted; further, an increased collateral circulation may prove a critical factor should secondary thrombosis extend beyond the pre-operative occlusion.

Our personal experience in this field is unfortunately too limited to permit us to submit a worth-while series nevertheless one feels that some of the lessons from the earlier difficulties we experienced might be of interest. One is that it is unwise to forecast the extent of necessary surgery on the aortographic findings alone. Nature has disobligingly allowed intimal deposits to form not only on the sides but at the front and back of these arteries, with the result that what might appear a simple problem from the A.P. view may seem vastly different from a lateral projection—if we could see one. Such lesions

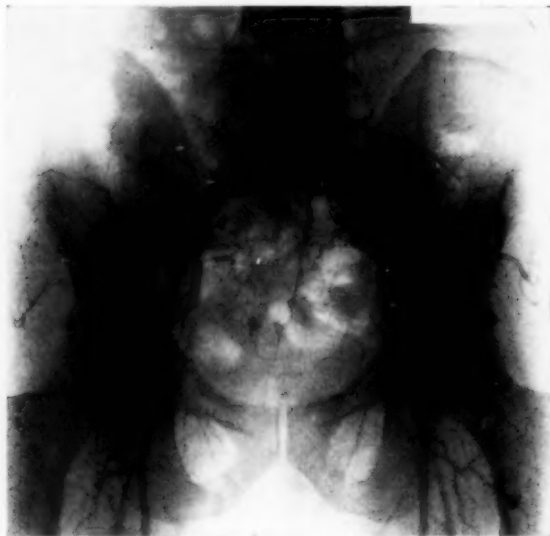


Fig. 1. Aortogram showing a localized area of stenosis of the R.common iliac, which at operation proved to be much more extensive than the X-ray appearances suggested.

limited to the anterior and posterior walls can, however, be detected in a good aortogram by a localized diminution in the opacity of the dye. Fig. 1 is a case in point: The stenosis of the right common iliac appeared fairly easy to tackle, but at operation one found a tongue of

calcified intima extending an inch up the posterior wall of the aorta. Removal of this would not have proved unduly difficult but, not having a graft ready at hand, one felt that the possible risk of leaving the patient with a weakened aortic wall was too great to take in view of his minimal symptoms (mild fatigue on walking), and nothing more than a ganglionectomy was done. One feels, however, that if we accept the fact that such stenotic lesions are but precursors of complete occlusion they should be tackled early, as the technical difficulties are then much less owing to the shortness of the lesion and the absence of the perivascular changes which follow complete thrombosis. But the risk should be a reasonably safe one.

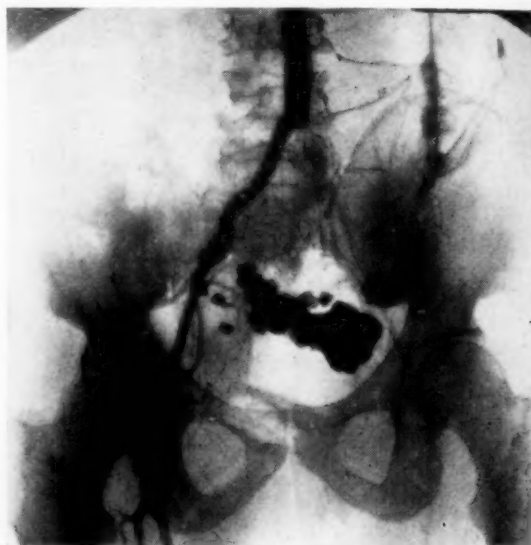


Fig. 2 (a). Aortogram showing localized area of obstruction of the L.common iliac artery, which appeared readily amenable to an endarterectomy.

This leads me to my second point—the necessity of having a graft available to fall back on, should unexpected difficulties arise. It is impossible to prejudge the state of the arterial wall and such ruptures as occur are nearly always due to necrosis of this structure. Few, even of the most ambitious, would care to see a patient who had walked into hospital for mild claudication leave on crutches. Another point, elementary though it may seem, is not to delay operation too long after arteriography has been carried out. Firstly, extensive thrombosis may occur in the interval without any dramatic change in the clinical state, and the conditions at operation may be found to differ widely from what was anticipated. Fig. 2 demonstrates this point. The original arteriogram suggested a relatively easy endarterectomy; but at operation 3 months later it was found that thrombosis had extended down to the femoral artery and, though the clot was milked out, a weak return flow presaged a

Fig. 2
carried
becom
down

poor re
aortic p
ganglion
aortogr
anatom
peritone
extrava
the ope
been a
Retrogr
doubles

The 7th
July 195
Cancer.
(Chairm
from dif
Gillman,
suggesti
cancer p
be kind

Question

1. Wh
national
of view,
within y
2. Wh
national

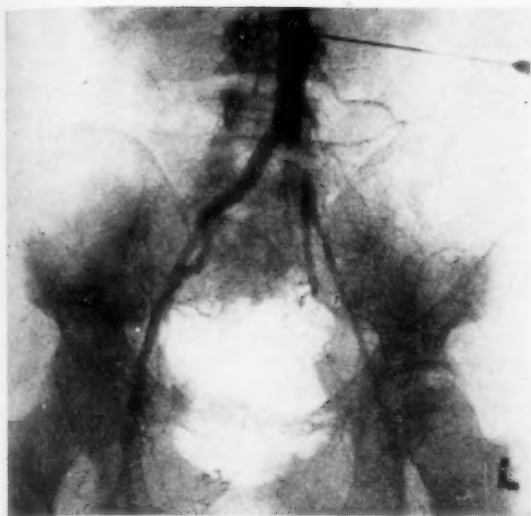


Fig. 2 (b). Aortogram taken after endarterectomy had been carried out. 3 months later. The common iliac artery has become re-obstructed owing to extension of thrombosis down the external iliac in the interim.



Fig. 2 (c). Aortogram taken 6 months after a by-pass homograft had been implanted. This should have been done instead of the original endarterectomy, had the extension of the thrombosis been appreciated.

poor result. Secondly, there is the direct result of the aortic puncture. One has repeatedly found that lumbar ganglionectomy carried out within a week or two of aortography is made much more tedious because the anatomy is obscured by extravasation in the retroperitoneal tissues. If enough time has elapsed for the extravasation to become organized into fibrous tissue the operation is increasingly difficult, and if there has been any accidental leak of dye, almost impossible. Retrograde aortography through a femoral catheter will doubtless avoid this difficulty, though there will always

be a certain proportion of cases in which this method is not feasible.

REFERENCES

1. dos Santos, J. C. (1947): *Mém. Acad. Chir.*, **42**, 675.
2. Leriche, R. (1947): *Lyon chir.*, **42**, 675.
3. Lemaire, A. (1945): *Bull. Soc. méd. Hôp. Paris* **65**, 656.
4. Bazy, L. (1949): *J. int. Chir.* **9**, 95.
5. Wylie, E. J. (1952): *Surgery*, **32**, 275.
6. *Idem* (1955): *Ibid.*, **37**, 415.
7. Barker, W. F. and Cannon, J. A. (1953): *Arch. Surg.*, **66**, 488.
8. Julian, O. C. *et al.* (1952): *Ibid.*, **136**, 459.

INTERNATIONAL CANCER CONGRESS

The 7th International Cancer Congress will be held in London in July 1958, under the auspices of the International Union against Cancer. The Committee consists of Dr. Ralston Paterson (Chairman), Dr. Brewster S. Miller (Secretary), and representatives from different countries in the world, including Professor Joseph Gillman, Johannesburg. The Committee is anxious to obtain suggestions from clinicians and investigators interested in the cancer problem, and has issued a request that those interested would be kind enough to answer the following questions:

Questionnaire on Improving Future International Congresses

1. What specific suggestions do you have to make future International Cancer Congresses more effective from your own point of view, as well as from the point of view of the cancer problem within your own country?

2. What subjects should be emphasized at The Seventh International Cancer Congress in London, July 1958, as far as can be

forseen at present? Cancer Research. Clinical Cancer. Cancer Control (Social Fight).

3. In relation to your suggestions under 2, are there any speakers you would especially like to be included on the programme? Speaker, Affiliation, Country, Subject.

4. Since abstracts of all presentations will be available to registrants at Congresses, how important in your opinion is good simultaneous translation in the meeting rooms? Of paramount importance. Of moderate importance. Of slight importance. Of no importance.

Replies should be sent either to Dr. Brewster S. Miller, American Cancer Society, Inc., 521 West 57th Street, N.Y. 19, U.S.A., or to Professor J. Gillman, Department of Physiology, University of the Witwatersrand, Medical School, Hospital Street, Johannesburg. These replies will be fully considered at a meeting to be held in Rome in August of this year.

LAMELLAR SCLERAL RESECTION—AN OPERATION FOR RETINAL DETACHMENT*

L. STAZ, M.B., B.CH. (DUBL.), D.O.M.S. (R.C.P. & S. ENG.).

Johannesburg

In spite of the increasingly satisfactory results obtained in the treatment of detachment of the retina by Weve's method of operation, certain types of cases were operated upon with the knowledge that the chance of success was poor (see below). To C. Dee Shapland (1953) much of the credit must be given for popularizing the operation of scleral resection, by his contributions to the English ophthalmic literature. Shapland has modified the operation of 'lamellar' partial-thickness scleral resection: my own technique is based on his method. The operation was first suggested and performed by Müller of Vienna for high myopia and detachment, and was re-introduced by Lindner (1933) for the treatment of cases of retinal detachment with poor prognosis. Lindner's technique was the full-thickness, penetrating excision of a strip of sclera, although I have heard Arruga referring to the lamellar operation plus surface diathermy coagulation, as performed by himself, as the 'Lindner operation'.

LAMELLAR SCLERAL RESECTION

The lamellar type of operation is apparently favoured by Arruga and Barraquer in Barcelona, by Paufigue in Lyons and by Shapland in London; and I witnessed their operations on a visit to their respective hospitals in 1953. The most spectacular or unorthodox demonstrations were the operations performed by Arruga on fully-dressed out-patients, described and photographed by Foster (1951). Arruga's average time of actual operating, that is excluding the preliminary irrigations etc., and injections of local anaesthetics, was 20 minutes. Stitching was done with a continuous suture of white silk, 'locked' at intervals. The patients walked back to their homes or hotels, where they were kept in bed and visited there for 2 weeks. Incidentally, in a description of a visit to Spaeth's clinic in Philadelphia, Robertson (1949) says that after a detachment operation, double dressings are maintained for about 10 days after operation, and then pin-hole spectacles are given. Elevation of the head is anticipated after about 3 weeks. Patients are usually out of bed during the 4th week and wear their pinhole spectacles for 6 months. This must surely have been modified by now, when the tendency is to ease the post-operative burden.

It is clinically observed that the diathermy reaction in the retina, after Weve's operation, does not start to 'dry up' until the 13th day and that the adhesion of the retina to the choroid is complete, but not firm, by about the 21st day. After the infolding of the scleral fibres and choroid as a result of the lamellar operation, contact between the tissues is made easier and the process of healing can occur while the patient has more freedom of movement.

* A paper presented at the South African Medical Congress, Pretoria, October 1955.

The operation of lamellar resection is not a mutilating one in spite of the folded appearance of the globe at the end of operation and, when it is done as a primary operation, gratifying results can be obtained, but there must be no laxity in the search for all retinal tears. The most important factor in the operation, as in all operations for the cure of retinal detachment, is the meticulous pre-operative search for holes in the retina, and the detailed examination of the vitreous. The most important instrument in every type of operation is the ophthalmoscope; and, as no two diathermy machines behave in the same way, one must know one's instrument and use it exclusively.

Symposium on Retinal Detachment, 1955

An interesting report of the *Symposium on Retinal Detachment* held in January 1955 at a Joint Meeting of the New York Society for Clinical Ophthalmology and the New York Academy of Medicine, Section of Ophthalmology, has only come to hand since the preparation of this paper. It should be read in full, though one does not necessarily agree with all it contains. Some of the important points in the report are as follows:

(a) Diathermy reaction causes retinal and vitreous shrinkage and not only may convert a simple detachment into a complicated one, but may put a complicated one beyond reach of even the scleral shortening operation. It is for this reason that one uses a minimal current (see below).

(b) After either surface or penetrating diathermy the sclera in the area of treatment will not take sutures for 3 months. With this statement I cannot agree at all. It may be true in the American technique, where the Walker pins are extensively used, but my own experience has shown no untoward effects or failures of the white silk sutures. Arruga uses diathermy around and in the gutter of the scleral resection as an integral part of his operation.

(c) One or even two vortex veins may be tied if in the way.

(d) A contributor to the symposium, Dr. Shipman, confirms the post-operative schedule quoted above (Robertson 1949), viz, double pad and bandage for 2 weeks, in bed 3 weeks, pin-hole goggles with a gradually enlarged hole for nearly 6 months, after which time only are patients allowed to resume their normal routine. One cannot visualize any of our own impatient population submitting to such a routine!

(e) The choice of case considered suitable for scleral resection operation is divided into 3 classes by Dr. G. Clark, another contributor. They correspond with the types of case which I have enumerated below.

CHOICE OF CASE

The following types of cases are considered suitable for the scleral resection operation:

1. Ev...
ment mu...
the retin...
in area a...
current.

2. Ret...

3. De...

globe. V...

contracti...
which ca...
any kind...

4. In...

atrophic...

5. Fol...

have fail...
newly-fo...

6. In...

as a rule...

From...

that prin...
every ca...
young p...
too dras...
ments, c...
detachme...

Pre-oper...

This is...

Arruga's...

on pre-o...

great va...
follows:

1. The...

As soon...

2. The...

in bed...

nothing...

retina...

choroid...

fluid. If...

able to...

through...

fluid, an...

and mak...

3. Fin...

bed rest...

event op...

The Aut...

This...

features...

1. Lar...

best as...

importa...

injection...

with ad...

and unc...

a very s...

2. No...

cornea

1. Every patient over 50 years old with retinal detachment must be considered as a potential candidate unless the retina is but shallowly raised and the tears limited in area and easily coagulated with a minimal diathermy current.

2. Retinal tears with detachment in aphakic eyes.

3. Detachment following perforating injuries of the globe. Weve's dictum is worth recalling: 'The pull of contracting vitreous bands is stronger than any adhesion which can be caused between retina and choroid by any kind of diathermy reaction'.

4. In the presence of very large retinal tears and atrophic-looking retinæ.

5. Following previous diathermy operations which have failed to seal off actual tears, or in the presence of newly-formed tears with coincident retinal detachment.

6. In rarer cases showing unusual features, including as a rule fixed retinal folds.

From the above list one is almost drawn to the opinion that primary scleral resection should be performed in every case except that of an inferior disinsertion in a young patient, but perhaps that conclusion is a little too drastic. With experience, which means disappointments, one learns, to a certain extent, to feel which detachment has a poor prognosis.

THE OPERATION

Pre-operative Routine

This is the same as for the ordinary Weve operation. Arruga's precepts are worth recalling. They are based on pre-operative rest in bed in correct position and are of great value in many cases. The results of this are as follows:

1. The retina may settle down in the region of the tear. As soon as this has occurred, operation should be done.

2. The detachment may remain unchanged with rest in bed. This occurs most usually with disinsertions, and nothing is gained by waiting for reapplication of the retina. The same is true in small tears with an altered choroid which does not readily absorb the sub-retinal fluid. If there is a very large tear, the choroid may not be able to absorb the large amount of fluid which passes through the tear. Here, by emptying the sub-retinal fluid, an initial operation may save the macular vision and make a second operation more favourable.

3. Finally, detachment may become worse despite bed rest. This probably indicates a choroiditis, in which event operation should be postponed.

The Author's Operative Technique

This combination embodies, one hopes, the best features picked out from the various masters:

1. Largactil plus Pethidine has been used for pre-medication but one finds Omnopon and scopolamine the best as a routine. Post-operative vomiting is of little importance and can be controlled if necessary by an injection of Largactil when need arises. Procaine 4% with adrenaline and hyalase is injected retro-bulbarly and under Tenon's capsule. Intravenous Pentothal is a very satisfactory anaesthetic.

2. No surface anaesthesia is used, in order to keep the cornea quite clear for ophthalmoscopic examination

during the operation. The head-lamp uni-ocular ophthalmoscope, brought to my notice by Dr. E. Epstein, is invariably used. Scheepens' more elaborate binocular instrument has not been tried.

3. Strict asepsis, which entails *inter alia* the wearing of rubber gloves and the isolating of the eye from the skin and lid margins by a muslin or gauze mask kept in place by dilute Mastisol. (Rubber gloves must be worn in every operation for detachment involving the use of diathermy; this aids the concentration of the current by preventing leakage into the operator's hands.)

4. Division of the attachment of the extra-ocular muscle involved in the area of sclera to be excised.

5. The region of any visible tear is treated with surface diathermy, as in Weve's operation with peripheral 'brushing' as done by Arruga, and included, if possible, in the area of sclera to be excised.

6. The amount of diathermy current used, as in the ordinary operation, is the lowest which shows a retinal reaction in 8-10 seconds. On my Monopolar Tourny machine, the average setting of the control dial is 4, giving a milliammeter reading of 50-70 MA, while on the bipolar machine the setting is about 3, giving a reading of 40-50 MA.

7. Marking of the area to be excised by means of the tip of an electrocautery. The strip is 4 mm. wide, with its anterior edge 10 mm. from, and concentric with, the limbus, elliptical in shape and stretching from the edge of one muscle to the edge of the muscle directly opposite.

8. The lamellar gutter is brushed gently with 3% KOH, the excess fluid being carefully mopped up and the cornea especially being protected.

9. Weve's perforations are done in the gutter in 3 or 4 positions and especially in the region of any retinal tears or folds. The needle must just touch the retina and not penetrate into the vitreous (Weekers, 1946). As much fluid as is possible with safety is gently sucked out by means of an ordinary dropper.

10. Stitching of the scleral edges can now be performed with ease. Continuous white silk on an atraumatic needle is used, locked by a knot every quarter of an inch approximately. I find this far easier and more satisfactory than the confusion of numerous interrupted stitches.

11. The divided external-ocular muscle is now re-attached to the globe, usually in the region of the stitched scleral lips. This constitutes a recession of about 4 mm. to balance the shortening of the globe by that amount.

12. Penicillin powder is dusted freely on the area, and the conjunctiva stitched with continuous black silk.

Post-operative Routine

Some relaxation in the duration of the strict binocular pad and bandage can be allowed, especially in old disorientated patients. This is exemplified by the case of an old lady who did everything she should not have done, including falling out of bed, scratching around in her bed-side locker, climbing up the wall, etc. Her mental condition, but not her physical activities, improved on dispensing with the binocular pad, and there was a perfect surgical result.

In a cooperative patient both eyes are kept bandaged for 14-16 days, the eye operated on being dressed on

every alternate day. A pin-hole goggle is then worn for a further period of 2 weeks and normal routine can be resumed 6 weeks after operation.

DELLAPORTA'S EXPERIMENTS ON DOGS

The fate of the folded scleral gutter, the choroid and the retina has been studied experimentally by Dellaporta (1954). His publication is well illustrated and is worthy of study. He states that shortening of the eyeball by scleral resection has proved to be successful in many cases of retinal detachment in which diathermy either has failed or offers a poor prognosis. Such cases include detachments in aphakic eyes without visible tears (I would add, with visible tears as well), total detachments, cases with exceptionally large tears, and detachments with fixed star folds or vitreous strands (particularly when caused by the passage of an intra-ocular foreign body).

Dellaporta and other authors quoted by him, using modified techniques of scleral folding, indicate that the two operations, viz. full-thickness scleral resection and scleral folding or 'lamellar resection', have similar effects in selected cases. The operations were performed on dogs' eyes and in each case a strip of sclera 3 mm. wide and 30-33 mm. long was excised 9-10 mm. posterior to the limbus. Absorbable catgut sutures had previously proved unsatisfactory for holding the wound edges tightly in apposition and so interrupted mattress sutures of silk were used. In the series of lamellar resection operations, the anterior 2/3rds of the scleral wall was excised and the anterior chamber was tapped to reduce the intra-ocular tension so as to facilitate the tying of the sutures. In neither series of operation is mention made of diathermy coagulation, either surface or penetrating, nor apparently was KOH used.

Dellaporta gives some comparisons of the *technical differences* in the operations of full-thickness scleral resection and lamellar resection in dogs, but many of his difficulties do not occur in operating on the human eye. I find I am not troubled by tension on the stitches, intra-ocular tension etc. because my practice is to carry out penetrating diathermy punctures in at least 3 or 4 positions in the exposed scleral gutter after having applied 3% KOH to the remaining thin layer of scleral fibres. During healing the punctures facilitate the ingrowth of fibroblasts, as demonstrated so beautifully by Weekers (1946), and, at the time of operation, the evacuation of sub-retinal fluid, and sometimes fluid vitreous. This makes the apposition of the wound margins very easy.

Dellaporta describes the *post-operative findings* in both series of cases:

Ophthalmoscopic findings were the same in both series, i.e. full-thickness and lamellar resection. Immediately after operation a band-shaped protrusion of the choroid and retina is observed along the operation area. The choroidal bulge disappears in 3 or 4 days, while the retina flattens more slowly. In about 8 days no ophthalmoscopically visible changes are seen in the operation area. However, in lamellar scleral folding, 10 days after operation a thin transparent retinal fold along the operation area is still visible.

Histologically in both series the scleral wounds were found to be firmly closed by connective tissue in 10 days. In 3 weeks the connective tissue in the wounds could hardly be distinguished from the surrounding sclera. In both operations it is obvious that the shortening of the sclerotic creates a surplus of choroid and retinal tissue in normal eyes. In scleral resection the choroid develops folds along the excised scleral strip, compensating for its tissue surplus. These folds generally last 2-4 days. In scleral folding the choroid is first indented by the 'scleral lamella' toward the interior of the eye but, during the operation or immediately after, the choroid detaches from the sclerotic and takes its normal stretched shape, compensating for its tissue surplus by a histologically visible thickening, extending to the posterior pole of the globe. In no case does the choroid develop folds in scleral folding.

After scleral resection, thickening of the choroid, with marked hyperemia and heavy infiltration with leucocytes, appears several hours after the operation. After 14 days, more or less firm adhesions are seen between the choroid and the inner surface of the sclera around the wound. Essentially different is the response of the uvea to the scleral folding operation. Neither the choroid nor the ciliary body shows noticeable inflammatory changes; especially are there no permanent tissue alterations.

The prompt stretching of the choroid within the operation area in scleral folding is caused by the presence of the 'scleral lamella' which detaches it from the inner surface of the sclera, and the absence of almost any inflammatory changes in the choroid. The normal elasticity of the latter structure is thus maintained, and adhesions to the scleral wound are prevented by the 'scleral lamella'.

Retina. After both operations, owing to surplus tissue, the retina is detached from the pigment epithelium within the operation area and develops folds. Thus, an artificial band-shaped separation along the operative fields is produced. From the anatomical point of view, it is similar to the serous retinal detachment in man. The sudden detachment and folding of the retina causes necrosis of many cells in the outer nuclear layer. This is much less after lamellar folding. A general shrinking of the retina within the operation area takes place. In scleral resection the detached retina re-adheres closely to the pigment epithelium in 10-14 days after operation. In lamellar folding, in spite of the approximation of the deeper structures to the retina, the latter may remain flatly detached for several weeks but will finally become permanently re-attached. There is eventually a general shrinkage of the surplus retina. In scleral resection some of the larger folds become fixed, this being due to the close and rapid re-attachment of the retina with the inflamed choroid. In scleral folding, because of the absence of inflammatory changes in the choroid, the folds always stretch and decrease to a multiple slight wrinkling of the retina.

Dellaporta concludes *inter alia* that when the surgeon wants to achieve shortening of a normal eye or a prompt and reliable relaxation of the choroid, as for instance in high myopia, scleral folding should be performed, but when a shortening operation has to be performed for

the treatment of retinal detachment scleral resection must be advocated.

Comment

I cannot agree with these conclusions in the light of my own experience and that of other writers quoted. It will be appreciated that Dellaporta's fascinating work has been carried out on the healthy eyes of dogs. There had been no pre-existing pathological detachment of the retina and consequent changes in choroid, retina and vitreous, and in his performance of the lamellar folding operation no inflammatory reaction was excited by diathermy surface coagulation or penetration, or by the application of KOH solution. In fact Dellaporta states that such procedures are not advisable.

In the pathological cases operated upon in human eyes I have found the scleral lamellar operation far safer to perform than the full-thickness scleral excision. When performed by the technique described in this paper, with the use of a mild but adequate diathermy reaction and a KOH chemical reaction to cause an aseptic chorio-retinitis, the clinical results have been very satisfactory. A few cases have shown that the surplus folds in the retina may remain for many months, being contained from spreading by a line of healed chorio-retinitis. They will possibly remain for the duration of life, and their presence in the periphery does not interfere with useful vision.

RESULTS

A series of approximately 30 cases that can be traced have been operated upon in 2½ years. A number of hospital cases have been lost sight of, so that their present visual acuity is unknown. Of the 32 eyes which

have been operated upon. 21 have been surgically successful and 12 have 6/18 or better vision. All the other successful cases have at least 6/60.

Illustrations of Dellaporta's experimental operations and diagrams of illustrative cases were shown. A small series of the author's cases were described, with fundus diagrams.

SUMMARY

1. A short history and description of the scleral lamellar resection operation as performed by a few overseas authorities is given.
2. It is suggested that the operation should be performed more often as a primary operation.
3. Indications for operation are given and pre-operative, operative and post-operative details and routines are described.
4. Dellaporta's experimental work on the fate of the scleral gutter is quoted in some detail.

REFERENCES

- Arruga, H. (1945): *Year Book of the Eye, Ear, Nose and Throat*, 1945. Chicago: Year Book Publishers, Inc.
 Clarke, G. *et al.* (1955): Symposium on Retinal Detachment. *Arch. Ophthalmol.*, **54**, 143.
 Dellaporta, A. N. (1954): *Arch. Ophthalmol.*, **51**, 525.
 Foster, J. (1951): *Trans. Ophthalm. Soc. U.K.*, **71**, 557.
 Lindner, K. (1933): *Klin. Mbl. Augenheilk.*, **90**, 757.
 Philips, A. S. (1948): *Brit. J. Ophthalmol.*, **32**, 811.
Idem (1951): *Trans. Ophthalm. Soc. U.K.*, **71**, 631.
 Shapland, C. D. (1951): *Ibid.*, **71**, 29.
Idem (1953): *Brit. J. Ophthalmol.*, **37**, 177.
 Robertson, F. W. (1949): *Trans. Ophthalm. Soc. U.K.*, **69**, 450.
 Weekers, L. (1946): *Brit. J. Ophthalmol.*, **30**, 715.

EXPERIENCES WITH A MOBILE BURIED IMPLANT AFTER ENUCLEATION*

A. I. FRIEDMANN, M.B., B.Ch. (RAND), D.O.M.S. (R.C.P. & S. ENG.),

and

J. GRAHAM SCOTT, M.D. (GLASG.), D.O.M.S. (R.C.P. & S. ENG.)

Johannesburg

Artificial eyes were used in statues and embalmed bodies several thousands of years ago. An eye painted on ivory was found in a statue excavated near the Oracle at Delphi. Numerous examples occur of artificial eyes fitted to ancient Egyptian mummy-cases.

The earliest reference to an artificial eye being used on human beings is in the Babylonian version of the Talmud, Nedarim, pages 66a and 66b, which was compiled over 1,600 years ago. The text suggests that a golden eye was used in a person's orbit.

In the 5th century B.C. an eye was painted on pottery stuck on a piece of cloth, which was then fastened over the socket of the patient.

* Papers presented at the South African Medical Congress, Pretoria, 1955.

In the 16th century the great French surgeon, Ambroise Paré, described artificial eyes made of silver or gold and enamelled to look like an eye. These were used in patients' sockets. In the 17th century glass was used for the first time in the manufacture of artificial eyes. In 1934 plastic material was used and several years later alloys, usually in conjunction with plastic material, were employed.

The surgical removal of an eye, or enucleation, has been practised as a surgical manoeuvre probably for hundreds of years. Until 1841 the operation was very crude. A stout thread was put through the eyeball, and the eyeball pulled forward. A knife was then pushed through the conjunctiva, swept around until the tissues were divided, and in this way the eye was 'delivered'. This operation left a socket that very seldom allowed an

artificial eye to be fitted. In 1841 Ferral described the anatomical relations of Tenon's capsule to the muscles and the orbital fat, and showed how an eyeball could easily be removed by working inside Tenon's capsule. In 1826 Cleobury had described how he performed an enucleation by working inside Tenon's capsule, but did not describe the anatomical relationships.

Since 1841 a tremendous number of modifications of enucleation have been described, an obvious indication of how unsatisfactory from the cosmetic and psychological point of view the 'straightforward' operation of enucleation has been.

Grimsdale and Brewerton, in discussing the bad cosmetic result of a simple enucleation, state that many patients prefer the frank deformity of an empty socket to the vacant staring look of a sunken prosthesis that has no movement. The main modifications of the simple enucleation were devised to provide a moving stump.

Mules (1884), dissatisfied with the cosmetic results of previous operations, performed an evisceration and removed an elliptical piece of sclera. He then inserted a glass ball into the sclera, and closed the opening with sutures. There were several modifications of this operation, some of which are in use today.

Adams Frost (1885) suggested that a glass globe be put into Tenon's capsule after enucleation. The cosmetic results were not as good as in Mules's operation, but complications were fewer. Chibret (1885) implanted a rabbit's eye into Tenon's capsule. According to his description the eye lived for some time and even developed corneal sensitivity. After 2 weeks, however, the rabbit's cornea dissolved in pus.

Greenwood (1914) stitched the superior to the inferior rectus and the lateral to the medial rectus and tied them over a glass ball.

Ramsay (1903) injected paraffin into Tenon's capsule, and Spratt (1905) used lard paraffin balls.

Rollet (1904) implanted a mass of skin and subcutaneous fat, which he took from the deltoid region, into Tenon's capsule.

Sattler (1912) suggested the use of costal cartilage in Tenon's capsule.

In the British Army ophthalmic issue in 1940, Mules's balls were replaced by the Duke-Elder sphere.

No new developments in the attempt to improve the cosmetic result of enucleation occurred until 1945, when Cutler described his famous ball-and-peg type of implant and prosthesis.

In 1946 J. H. Allen, discussing an article by himself, C. S. O'Brien and L. Allen, described a modification of the Cutler implant. This modification, however, was also not completely buried.

The sad history of the almost perfect mechanical implants which were not completely buried is too well known to bear reiteration. It was, however, from their modification of the Cutler implant that J. H. and L. Allen developed a buried implant which has none of the disadvantages of the Cutler type of implant, but still imparts very good movement to the prosthesis and gives enough 'body' to the socket to prevent the sunken appearance associated with ordinary enucleations. A full description of their implant and their technique of using it after enucleation appeared in the Archives

of Ophthalmology of 5 May 1950. We should like to pay tribute to the lucidity of the text and the very fine drawings which make it easy to follow the descriptions step by step. In fact the simplicity of the drawings to some extent belies the technical difficulties presented during the operation.

THE ALLEN OPERATION

The implant used is almost hemispherical. It is 21 mm. in diameter, the size approximating to that of the posterior half of the globe. A smaller size is used for very young children. It contains 4 tunnels; after enucleation the vertical recti are each brought through the superior and inferior tunnels and stitched together in the opening on the face of the implant, and the lateral and medial recti are brought through the lateral and medial tunnels and stitched together. The vertically and horizontally-acting muscles are stitched together, and the implant is covered with Tenon's capsule and conjunctiva, which is stitched.

A month afterwards the prosthesis is fitted. It approximates in size to the anterior half of the globe, and has a flat, not concave, posterior surface. This lies on the flat rim of the face of the implant, and it is this contact which imparts movement to the prosthesis.

Some Comments

In their technique the Allens use one stitch to each edge of the muscle, making in all 8 stitches, which means there are 16 ends. In our experience, if only one double-armed suture is used for each muscle, it simplifies the operation a great deal, cuts down the time appreciably and obviates a lot of muttered imprecations while sutures are sorted out.

Perhaps the most difficult aspect of the operation is stitching the muscles together in the opening of the face of the implant, because there is very little room to work in, and the edge of the opening in the face allows of little manoeuvring. This becomes most apparent when the opposing muscles are being stitched together. It is difficult at this step to keep the muscles sufficiently taut. To overcome this we have modified the technique as follows:

Whilst the implant is held firmly with forceps by the assistant, a vertical muscle and a horizontal muscle are pulled firmly through their respective tunnels until they cross each other. They are then clamped together with an artery forceps just beyond the crossing, and stitched together at the crossing. The other pair of muscles is then treated in the same way. The two lots are finally stitched together so that the combined junction lies in the centre of the face of the implant. The muscles should, however, not be pulled too tight, because movements of the implant become limited.

A complication arising from the Allen technique is that the nasal edge of the implant may push forward so that it is very difficult to fit the prosthesis properly. In fact, in extreme cases the prosthesis will not stay behind the lids. To overcome this, after the muscles have been stitched together, the central junction of the muscles is gripped with a forceps whilst the implant is rotated with another forceps so as to tilt the temporal

edge of the implant forwards. White silk is then stitched through the lateral rectus and around the bridge of its tunnel several times so as to anchor the implant in this position. This procedure improves the cosmetic and the functional result.

RESULTS AND COMPLICATIONS

Twenty-five of these operations are reported in the present series. The first was performed $4\frac{1}{2}$ years ago and the last in this series a year ago. More than 60% were done at least 2 years ago. Figs. 1, 2 and 3 illustrate the result in 3 cases.



Fig. 1



Fig. 2



Fig. 3

Two cases have been failures; a fistula developed in both, infection supervened, the external rectus sloughed

and the implant had to be removed. It is difficult to determine whether the primary cause of the failure was imperfect closing of the conjunctiva at operation, or pressure on the conjunctiva from the implant or from the prosthesis, or infection from buried stitches, or some other cause.

One of the failures was a man whose orbit had been riddled with quartz from a blast accident. When the implant was removed, exudate was found around particles of buried quartz and he was probably an unsuitable case for the operation, but he had retained the implant and worn a prosthesis for a year. Another complication arose in his case. The lower fornix was shallow and when he looked up or sneezed, the prosthesis fell out. This was overcome by doing a fine tarsorrhaphy at the inner end of the lids, which was successful in retaining the prosthesis and was scarcely noticeable.

The other failure was a boy whose conjunctival edges did not heal despite the absence of infection. He was readmitted after a month but, despite freeing and freshening the edges of the wound, the hole would not close. After 4 months a prosthesis was fitted, which was worn without discomfort or discharge for a further 8 months. After this the socket became infected and, although this was cured with local antibiotics, the external rectus had sloughed and the implant had to be removed.

There are 2 other cases in which the conjunctiva did not heal. One is an old woman on whom 3 attempts have been made to join the edges of the hole but all have failed. She uses an antibiotic ointment daily and has worn her prosthesis for 18 months. The other patient was operated on overseas and came complaining of profuse discharge from the socket. After antibiotic therapy it was possible to resuture the conjunctival wound. The operation was successful and there has been no discharge for a year.

One complication that we have met is tilting of the implant so that the prosthesis leaves a gap on the nasal side, or even falls out when the patient looks to the side. An attempt was made to correct this in one case by carrying out a squint operation on the implant. This was partly successful and although a gap can be noted, the prosthesis no longer falls out.

Another complication, found in one case, was a lax lower lid which would not allow the retention of the prosthesis. The Dimmer modification of Kuhnt's operation for ectropion gave a very satisfactory result.

CONCLUSIONS

The use of the Allen type of buried implant is, in the large majority of cases, a very satisfactory operation. The cosmetic results are very good.

The most important difficulty is that of securing permanent closure of the conjunctiva, for which careful suturing without tension is the best answer.

Another difficulty is the nasal tilting of the implant, which is easy to rectify either by stitching it with a temporal tilt, or by tightening the muscles to make the implant lie deeper.

The final difficulty, perhaps better called a disappointment, is the fact that the vertical movements are not as good as the lateral ones. The answer to this problem is

probably the use of magnets in the implant and the prosthesis.

SUMMARY

1. Twenty-five cases of the buried Allen implant are reported at intervals of between 1 and 4½ years after operation.

2. Two failures and other complications are described.

3. Modifications in technique are suggested.

All the implants and prostheses were made by Mr. A. Schulmeister, without whose cooperation these cases could not have been done.

REFERENCES

Frost, W. A. (1885): Middlemore Prize Essay. Quoted in Grimsdale and Brewerton, *op. cit.*, pp. 178-225.

Allen, J. H. (1946): *Trans. Amer. Ophthalm. Soc.*, **44**, 296.
 Allen, J. H. and Allen, L. (1950): *Arch. ophthalm.*, **43**, 879.
 Chibret, (1885): *Rev. gen. Ophthalm.*, pp. 193. Quoted in Grimsdale and Brewerton *op. cit.*, pp. 178-225.
 Cleobury, W. (1826): *A Review of the Different Operations on the Eyes*. London: Underwood.
 Cutler, N. L. (1945): *Proceedings of the Ophthalmic Conference*, Crile General Hospital, Cleveland, Ohio.
 Ferral, (1841): *Dublin J. Med. Sci.*, **19**, 329.
 Greenwood, ? A. (1905): *Knapp's Arch. Ophthalm.*, **34**, 123.
 Grimsdale, H. and Brewerton, E. (1920): *A Textbook of Ophthalmic Operations*. 2nd ed. London: Ballière, Tindall and Cox.
 Mules, P. H. (1885): *Trans. Ophthalm. Soc. U.K.*, vol 5.
 O'Brien, C. S., Allen, J. H. and Allen, L. (1946): *Trans. Amer. Ophthalm. Soc.*, **44**, 296.
 Ramsay, A. M. (1903): *Lancet*, **1**, 299; and *Ophthalm. Rev.* **22**, 181.
 Rollet, ? E. (1904): *Clin. Ophthalm.*, **5**, 377.
 Sattler, ? C. H. (1912) *Proc. Heidel. Cong.* Quoted by Grimsdale and Brewerton, *op. cit.*, pp. 178-225.

ETHER: A VINDICATION

C. H. H. COETZEE, M.B., CH.B. (EDIN.)

Pretoria

I found Dr. Samson's short article *Cyclopropane: a Vindication*,¹ which appeared in our *Journal* of 25 February, most interesting and full of common sense. With cyclopropane anaesthesia his veiled battle cry appears to be 'Oxygen! More oxygen!' I fully endorse his views and here wish to repeat his battle cry of 'Oxygen! More oxygen!' in association with ether.

To my mind he rightly concludes that where there is a sufficiency of oxygen in the system—I prefer an excess of oxygen—there can be no symptoms of hypoventilation—no slowing of the pulse and raising of blood pressure, no ventricular fibrillation—irrespective of what anaesthetic is used, even in moderate excess.

My interest, however, is not in Dr. Samson's cyclopropane, but in his logical reasoning, which I apply to ether; I never use cyclopropane. Except where there is an explosion hazard I always use ether and pure oxygen, with a flow of 6 litres per minute, after induction with N_2O plus O_2 plus Tritene or pentothal plus a relaxant. Where I have not used this excess I have on a few occasions had reason to regret that oversight.

When cyclopropane came into fashion I soon found out that there is nothing you can do with it that you cannot do equally well, or better, with ether, when once your patient is safely induced with say, Pentothal plus a relaxant or by N_2O plus O_2 plus Tritene. The optimum flow of oxygen in the semi-closed system is 6 litres to the minute. If you use more—say 10 or 12 litres—there is the possibility of too little rebreathing, resulting (theoretically) in an accumulation of CO_2 in the lung alveoli in spite of a good colour in your patient—a combined excess of oxygen and CO_2 . If you use too little—say 2 litres—there is the danger of an excessive accumulation of CO_2 in the system as well as an excess of ether, neither of which gets sufficiently blown off. Your patient will, to start with, breathe too deeply but eventually the breathing centre will become exhausted and natural breathing will cease.

I was brought up in the Edinburgh school of open chloroform and ether. Subsequent advances I had to pick up in the hard way—by trial and error. I fully appreciate Dr. Samson's suspicions that ventricular fibrillation is brought on by an insufficiency of oxygen rather than by the anaesthetic *per se*—even with chloroform.

DIFFICULTIES OF THE CLOSED TECHNIQUE

To my mind an unavoidable evil with cyclopropane is the necessity of the difficult closed technique, for the sake of economy—a technique which lends itself so easily to hypoxia and excess of CO_2 in the hands of the less experienced. Economy, to my mind, is the only advantage in the closed technique. A similar opinion was recently expressed by Sir Robert Macintosh when he visited us in Pretoria.

Dr. Samson states that innumerable patients of his manifested varying degrees of 'cyclo shock' because of his initial inexperience of the closed circuit technique. This condition he ascribes to lack of oxygen. I am sure that with ether and a 6-litre flow of oxygen such collapse would not have occurred in the semi-closed technique. I use this 6-litre flow even in infants with the Ayres tube or a completely open valve—a valve held open by a thick safety pin. In both these instances the bag is only used as an indicator with minimum rebreathing.

I am told that it is bad practice to give pure oxygen, 6 litres to the minute, with ether because there is a possibility of oxygen intoxication. Although I have given about 35,000 anaesthetics, of which well over half were with oxygen and ether, I have never yet come across this dangerous oxygen intoxication. To give pure oxygen in a closed circuit necessitating controlled respiration is a different matter. Here the oxygen pressure in the alveoli rises considerably, varying with the pressure applied to the bag or bellows. One can imagine the possibility of an excessive absorption of oxygen here. It is stated, by those who are supposed to know, that you require a continuous oxygen pressure of 3 atmospheres before such intoxication can be induced. At our altitude the atmospheric pressure is considerably less than 1 atmosphere as measured at sea level.

Again, we are told one is apt to get an excess of CO_2 in the system and alveoli. This I maintain is impossible with a 6-litre flow to the minute. With that flow you get the optimum blow-off to keep the CO_2 concentration down, yet sufficient rebreathing with normal excursions. If the excursions are subnormal there must be obstruction or other reasons.

I know of a case in which a flow of 2 litres per minute of oxygen with ether caused an anaesthetic death, following on 12 hours of artificial respiration and many stormy recoveries. With a 2-litre flow there is the very definite danger of an excessive accumulation of CO_2 as well as of ether—not enough blow-off. On the other hand with a 12-litre flow insufficient rebreathing may ensue, resulting in shallow breathing insufficient to empty the alveoli of their CO_2 which, theoretically, in spite of a good colour in the patient, may cause an excessive retention of CO_2 in the blood, sufficient to upset the nerve centres and heart. This I maintain cannot happen with an unobstructed flow of 6 litres—the happy medium between 2 and 12. It has certainly never occurred in my 20,000 cases.

I maintain that in the past we were in the habit of giving ether in far too high a concentration. Not many years ago I saw a senior anaesthetist bubbling his gases through two bottles of ether! What a safe anaesthetic we have in ether! The more I use ether the less of it I use! I remember reading an account of the first occasion when ether was administered in South Africa. The patient had to have a leg off. After the operation he stated that he could recollect much of the conversation going on during the operation, yet felt

no pain! History, however, does not relate how much morphia and alcohol he had before the operation.

I fully agree with Dr. Samson that the complicated method of administration very greatly mitigates against the safe use of cyclopropane. To my mind the only advantage of cyclopropane over ether lies in its more pleasant induction. This advantage is of no account nowadays with the almost universal use of intravenous induction.

OVER-ESTIMATING THE VENTILATION

Dr. Samson concludes with these words: 'It appears that the extent of ventilation is too often over-estimated with the result

that weird phenomena make their unwanted intrusion. It is high time, therefore, that there was a change in the teaching of anaesthesia in this respect. The normal tidal volume must be maintained with adequate oxygen intake, and excess CO_2 must be prevented at all times. This is a cardinal rule applicable not only to general anaesthesia but also to the treatment of and prevention of pulmonary conditions. Most of the morbidity and mortality associated with narcosis can be prevented. Let us call a halt to making the *narcotic* the scapegoat of general anaesthesia'. I fully agree.

1. Samson, H. H. (1956): S. Afr. Med. J., 30, 197.

A PLEA FOR MATERNAL SERVICES IN SOUTH AFRICA WITH PARTICULAR REFERENCE TO THE RURAL AREAS*

J. C. COETZEE, M.A., M.A.O., L.M. (ROTUNDA), F.R.C.O.G.

Chairman, South African Society of Gynaecologists and Obstetricians (Cape Town Sub-group)

This subject is of great importance to us as doctors, but it is of greater importance to the women of our country. The care of women during childbirth is a measure of the degree of civilization of a community. A baby saved at birth has a chance of living 60 years but, with its loss, that is the time society is denied a potential citizen.

Maternal and infant mortality is the index of a nation's status in the modern world. The first demand is to bring the mother safely through pregnancy labour and puerperium. The second is to secure the birth of a healthy infant with the best possible endowment of its tissues. The third is to leave the mother at the end of her lying-in period as well as she was when she became pregnant. The key or solution to these demands is a good maternity and infant health service.

THE PROBLEM

In South Africa with its progressive industrialization there has been an ever-increasing urbanization of the country population, particularly the Bantu population. Agriculture still remains a major industry. There will always be a large rural population in this country. In Europe 18-22% of the population need to be employed in agriculture in order to provide for its countries' requirements. In USA it is considered that 8½% is sufficient. In South Africa 47% of the population still live on farms.

Social welfare, housing, health and education, town planning, road services, and the building of new roads are our main problems. Health however, is our biggest problem. The social and health problem which history and geography have imposed on South Africa is the organization of a country where 2,907,000 Whites must live and work with 1,281,000 Coloured people and 9½ million Natives in a continent of 150 million Blacks.

We are particularly concerned tonight with the welfare of mother and child in the southern portion of this vast continent. Although there has been a steady fall in maternal and infantile mortality in the enlightened areas, the wastage of maternal and infant life is still far too high. The stillbirth and neonatal deaths remain almost stationary. Delee's famous quotation still holds today, that there is no form of preventative medicine that gives such glittering returns (in the saving of mother's and infants' lives, as an efficient maternal and infant service).

If the stillbirth rate of Great Britain could be reduced to that of Denmark there would be an annual saving of 6,000 lives. It would be of interest to know what the comparative and relative figures for South Africa would be. The saving of infant lives has a far greater economic and social influence than the reduction of deaths from, for instance, heart disease.

One of the major aims of State policy in South Africa should be to make it possible for every mother, irrespective of her social position, to have the best possible maternal service. There has been an increasing demand on the part of women to have their confinement

* Valedictory Address delivered at the Annual General Meeting of the Cape Town Sub-group on 24 February 1956, when Dr. Coetzee was re-elected chairman for the forthcoming year.

in institutions. With economic insecurity go bad housing, overcrowding, squalor and ignorance. If these exist the technical side of maternal health services function with great difficulty, and with much less effect. One of the conclusions of the Royal College report on National maternal services is that good results depend primarily on the technical side. The rise of institutional midwifery has helped to raise general standards throughout the UK.

The integration of institutional, domiciliary, antenatal and consultant services has had a notable effect on maternal mortality in England. This was my personal experience during the time I was acting for Mr. Rufus Thomas as consultant to the county borough of Croydon. The low maternal infant death rates in countries like New Zealand and Sweden are not accidental gifts from heaven. They are acquired by the efforts of their own people.

UNITED STATES AND CANADA

In the USA all the states make special provisions for the health and related welfare of mothers and children. Many general health facilities and services vitally affect their well-being and actually furnish a framework for programmes organized specifically for these selected population-groups. Improved sanitation—particularly supervision of water and milk supplies—has done much to reduce infant mortality. Certain other services designed especially for mothers, mothers to be, infants and pre-school and school-age children have been initiated to supplement the more general health services. An outstanding function of State health programmes is the promotion of maternity and child health. However, special mention should be made of the fact that State efforts have been enlarged appreciably as a result of Federal financial aid. Health services for mothers, infants and pre-school children are provided in the main by the State government. State university hospitals, 24 of which are listed, afford primary health centres for both out-patient and in-patient maternity and pediatric care. Special provisions are made for women with complications developing during pregnancy, or for whom delivery problems are anticipated.

The important features include training of nurses and physicians in premature services; research into causes of pre-maturity and methods of improving care; establishment of strategically located premature centres equipped to give specialized care. Continued supervision of midwives, by State health-department personnel, takes the form of training and review through classes, and institutional and individual instruction. For the USA as a whole the maternal mortality in 1950 was 0.83 per 1,000. In the state of Minnesota the figures were 0.3 (1951). In Minnesota a vigorous approach has been made to the problem of antenatal care and the handling of complications and anticipated complications in pregnant women.

In Canada there is a Department of National Health Welfare. The Indian and Eskimo population also fall under the scheme. The field unit in the Indian health service is under the charge of graduate nurses who conduct prenatal and health-educational clinics. Some of the health centres have beds and sufficient auxil-

liary staff to take care of maternity cases. The birth rates are high—between 25 and 50 per 1,000. The death rates are high, too, but the nett gain is a normal population-increase of about 1½% per year. In Canada, like any other country, the infant and maternity mortality rates are valuable indications of the status of maternal and child health. The maternal mortality figures for 1951 remain at the low level of 1·1 per 1,000 births.

SWEDEN

As regards northern Europe, special mention should be made of the 5 countries of Denmark, Finland, Iceland, Norway and Sweden. They form no political or economic union of any sort, but they are often looked upon as a collective entity. They are related to each other by firm bonds of geographical proximity and cultural ties. Out of these countries I particularly want to select and speak of Sweden. One of the most impressive aspects of its public-health service is its maternity service and its child welfare clinics. If South Africa should ever embark on a State maternity service the health service of Sweden should be seriously studied. It is surprising how much of their methods could be adopted with advantage to South Africa. I made a special study of the maternity services in Sweden, and I got some very valuable information from the book *Freedom and Welfare—Social Patterns in the Northern Countries of Europe*, edited by George Nelson, of Denmark.

Sweden is a large country by European standards. It is nearly twice the size of Great Britain. Five of its towns would be considered large by South African standards. More than half the population live in rural areas, including small towns and villages. It is a long narrow country measuring nearly 1,000 miles from north to south and transport problems are difficult. The winter climate is bitterly cold. There is much agricultural development, and timber is used extensively for building. The general standards of living are good, if not exceptionally high. There is apparently not much wealth, but there is little if any real poverty. Sweden has only become industrialized during the last half century, and as a result Sweden has benefited by the experience of all the countries. The government has for many years interested itself in the housing problem of the new townships.

For administrative purposes Sweden is divided into 24 provinces each with its own Provincial Council. The Royal Medical Board is responsible for the health services. There are about 600 Provincial doctors who deal with all matters of medical care outside the institutions, including maternal and child welfare and preventive health services. These doctors do their work outside the large towns. The administrative medical officers in the employ of the Swedish Government are allowed to carry on private work. In the remote and sparsely populated districts a system or network of cottage hospitals has been established. The system of district nursing is an essential and very valuable feature of the Medical Service. The nurses organize and attend maternal and child welfare clinics. Formerly a large number of district midwives were employed but, with the modern tendency for practically all deliveries to take place in hospitals, the numbers have been reduced. Sweden is noted for its hospitals. Professor J. T. Louw and I took the opportunity of seeing the two famous hospitals in Stockholm. The very fine Karolinska and the even better and more modern Southern Hospital erected during and since the last war. One of the most impressive aspects of public-health services in Sweden is their child welfare work. The public-health work is educational in character. Sweden has had a system of state-aided care through so-called Provincial doctors since 1688 (over 200 years). The Provincial doctor deals with matters of preventive medicine and maternity services.

A SCHEME FOR SOUTH AFRICA

The expectant-mother population of the larger towns and cities of South Africa have been taught to become hospital minded. The demand by the mothers themselves for institutional confinement is increasing for a variety of reasons. This demand should be encouraged. Delivery in a hospital unit, or in a maternity home, staffed by general practitioners in the country and outlying districts, offers greater safety to mother and child than delivery in a patient's home. Modern institutional midwifery can be made remarkably safe. General practitioners will take advantage of hospital facilities more than before, and will attend more maternity cases.

I feel that my talk this evening would not be complete without a brief outline of maternity services in South Africa. Primarily the facts to be considered in such a scheme are the geography of the country, the large sparsely populated areas, the density of the population in the city and in the industrial areas, the size of the towns and, of course, transport.

The country should be divided into large health regions, each based on a maternity centre, and there should be 3 grades of maternity centres—the key or *Primary* centre, the *Divisional* centre and the *Peripheral* centre.

The *Primary* centre would be the chief consultative centre in the region. Such a centre would consist of a maternity unit, and there would be an associated gynaecological unit. The centre should, wherever possible, be associated with a university and attached to a medical school. The maternity unit would consist of lying-in beds and an appropriate number of antenatal beds with a department for infants, an ambulance and emergency service complete with flying squads and antenatal and postnatal clinics.

The *Divisional* centres would be in the larger towns. These centres should be just as well equipped as the *Primary* centres. Specialist staff should be provided, both obstetric and paediatric. The beds in the hospital would provide accommodation for their own booked cases as well as emergency cases sent from outside.

Peripheral centres would be small units in the smaller plateland towns and villages, in charge of selected general practitioners. These centres should also be provided with antenatal and postnatal clinics. Beds should be available for local women who wish to have institutional confinement, and also for emergency cases. These centres should be in touch with the nearest *Divisional* centre, from which the specialist staff could come for consultations or operations.

General practitioners should take an important share in maternity services—primarily those with special experience. There are those who for years have been specially interested in obstetrics in their practices and have become skilful and experienced in that way. There are those who after qualification have held resident obstetric appointments in approved hospitals, and those who have fitted themselves by a course of postgraduate study and have obtained special qualifications to become general practitioner-obstetricians in a sense originally intended by the National Health Service Act of England. General practitioner-obstetricians should be given every facility to see in the clinics and wards those patients whom they have referred for special treatment. The smooth working of maternity services in the best interest of expectant mothers depends on cooperation and goodwill between all those who are working in the field. I am convinced that the College of Physicians and Surgeons of South Africa will soon after inauguration willingly provide for a diploma in obstetrics to general practitioners.

The aim should be to restrict domiciliary midwifery to those practitioners who have themselves become general practitioner-obstetricians. The training of midwives has been progressively improved in South Africa. They aim at natural labour and their results are excellent. Midwives should not be regarded as competent to undertake unaided the antenatal care of the expectant mother, but should always work in collaboration with a general practitioner or the obstetrician of the clinic.

In summing up I wish to state that those of us who have devoted our lives to obstetrics, and have known the conditions of practice in South Africa, realize that good results are dependent on the following essentials:

1. Efficacious antenatal and intranatal care for every pregnant mother.
2. Adequate accommodation in well-organized institutions for all patients requiring institutional treatment.
3. A body of midwives well trained to do their routine domiciliary obstetric practice.
4. A body of doctors with adequate experience and interest in obstetrics, who appreciate the limitations of operative obstetrics performed at home.
5. A body of specialists who have received a very complete and thorough training as assistants, and have not simply picked up experience by their own mistakes.

In conclusion I want to express my gratitude to Dr. B. Maule Clark, Deputy Chief Health Officer of the Union, who, through the Government Medical Library, sent me some very valuable

literature
want to th
of his ow
and Amer

The Mini
December
1956) has
Registrati
African M
the Medi
stitution
2533 of 1

Any degr
terms of
F.B.A.R.
R.C.P.
F.R.C.P.
D.C.H. I
Eng. D.
R.C.S. I
R.C.P. L
D.O.R.C.
D.Phys.M
R.C.S. E
R.C.P. L
& S. Irel
Eng., F
M.M.Soc
Aberd.,
Amsterd
Univ. Bo
Univ. B
Birm., M
M.D.Un
Ch.M.U
M.S.P.S.
D.M.R.
Univ. C
(Derm.)
(Paed.)
M.Med.
Town, N
Ch.M.(C
Town, C
D.G.O.
M.D.Un
D.P.M.
M.D.Un
B.Sc.(P
Edin.,
Univ. E
Univ. E
Erlange
M.D.Un

* as

In May
Cape R
General
fitting
sacrific
The i
who un
widespr

literature on health services in many countries of the world. I want to thank him specially for including in this collection a copy of his own work *Impressions of some Health Services in Europe and America*.

The briefly outlined proposed maternity services are largely based on the 1944 and 1955 reports drawn up by the Council of the Royal College of Obstetricians and Gynaecologists by request of the National Health Services in Britain.

SOUTH AFRICAN MEDICAL AND DENTAL COUNCIL

The Minister of Health (in Government Notice No. 2440 of 15 December 1955, published in the Government Gazette of 9 March 1956) has approved of the following new Rules regarding the Registration of Additional Qualifications made by the South African Medical and Dental Council under section 94 (2) (h) of the Medical, Dental and Pharmacy Act No. 13 of 1928 in substitution for the rules published under Government Notice No. 2533 of 1953, as amended and now rescinded:

(a) MEDICAL PRACTITIONERS

Any degree, diploma or certificate recognized by the Council* in terms of section 22 or section 23 of the Act; and the following: F.B.A.R., F.F.R., D.Obst.R.C.O.G., F.R.C.O.G., M.R.C.O.G., F.R.C.P.Edin., M.R.C.P.Edin., F.R.C.P.Irel., M.R.C.P.Irel., F.R.C.P.Lond., M.R.C.P.Lond., D.A.R.C.P.Lond.R.C.S.Eng., D.C.H.R.C.P.Lond.R.C.S.Eng., D.G.O.R.C.P.Lond.R.C.S.Eng., D.I.H.R.C.P.Lond.R.C.S.Eng., D.L.O.R.C.P.Lond.R.C.S.Eng., D.M.R.R.C.P.Lond.R.C.S.Eng., D.M.R.D.R.C.P.Lond.R.C.S.Eng., D.O.M.S.R.C.P.Lond.R.C.S.Eng., D.O.R.C.P.Lond.R.C.S.Eng., D.Path.R.C.P.Lond.R.C.S.Eng., D.Phys.Lond.R.C.P.Lond.R.C.S.Eng., D.P.M.R.C.P.Lond.R.C.S.Eng., D.P.H.R.C.P.Lond.R.C.S.Eng., D.T.M. & Hy.R.C.P.Lond.R.C.S.Eng., D.A.R.C.P. & S.Irel., D.C.H.R.C.P. & S.Irel., D.O.M.S.R.C.P. & S.Irel., R.F.P.S.Glasg., F.R.C.P. & S.Canada, F.R.C.S.Edin., F.R.C.S.Eng., F.F.A.R.C.S.Eng., F.R.C.S.Irel., F.R.F.P.S.Glasg., M.M.Soc.Apoth.Lond., D.I.H.Soc.Apoth.Lond., D.P.H.Univ.Aberd., M.D.Univ.Aberd., Ch.M.Univ.Aberd., M.D.Univ.Amsterdam, M.D.Univ.Basle, D.P.H.Q.Univ.Belf., M.D.Q.Univ.Belf., M.A.O.Q.Univ.Belf., M.Ch.Q.Univ.Belf., M.D.Univ.Berlin, M.D.Univ.Berne, M.D.Univ.Birm., Ch.M.Univ.Birm., M.D.Univ.Bombay, M.S.Univ.Bombay, M.D.Univ.Bonn, M.D.Univ.Breslau, D.P.H.Univ.Brist., M.D.Univ.Brist., Ch.M.Univ.Brist., M.D.Univ.Calcutta, M.O.Univ.Calcutta, M.S.Univ.Calcutta, M.D.Univ.Cantab., M.Chir.Univ.Cantab., D.M.R.Univ.Cape Town, D.P.H.Univ.Cape Town, M.D.Univ.Cape Town, M.Med.(Anaes.)Univ.Cape Town, M.Med.(Derm.)Univ.Cape Town, M.Med.Univ.Cape Town, M.Med.(Paed.)Univ.Cape Town, M.Med.(Path.)Univ.Cape Town, M.Med.(Rad.D.)Univ.Cape Town, M.Med.(Rad.T.)Univ.Cape Town, M.D. & G.Univ.Cape Town, Ch.M.Univ.Cape Town, Ch.M.(Ophth.)Univ.Cape Town, Ch.M.(Orth.)Univ.Cape Town, Ch.M.(Otol.)Univ.Cape Town, Med.Sc.D.Univ.Columbia, D.G.O.Univ.Dubl., D.P.M.Univ.Dubl., D.P.H.Univ.Dubl., M.D.Univ.Dubl., M.A.O.Univ.Dubl., M.Ch.Univ.Dubl., D.P.M.Univ.Durh., D.P.H.Univ.Durh., D.Hy.Univ.Durh., M.D.Univ.Durh., D.Ch.Univ.Durh., M.D.Univ.Düsseldorf, B.Sc.(P.H.)Univ.Edin., D.M.R.Univ.Edin., D.M.R.D.Univ.Edin., D.M.R.T.Univ.Edin., D.Psych.Univ.Edin., D.P.H.Univ.Edin., D.R.Univ.Edin., D.T.M. & H.Univ.Edin., M.D.Univ.Edin., D.Sc.(P.H.)Univ.Edin., Ch.M.Univ.Edin., M.D.Univ.Erlangen, M.D.Univ.Frankfurt a/Main, M.D.Univ.Freiburg, M.D.Univ.Geneva, M.D.Univ.Giessen, B.Sc.(P.H.)Univ.Glasg.,

D.P.H.Univ.Glasg., M.D.Univ.Glasg., D.Sc.(P.H.)Univ.Glasg., Ch.M.Univ.Glasg., M.D.Univ.Göttingen, M.D.Univ.Greifswald, M.D.Univ.Groningen, M.D.Univ.Halle, M.D.Univ.Hamburg, M.D.Univ.Heidelberg, D.P.H.N.Univ.Irel., M.D.N.Univ.Irel., M.A.O.N.Univ.Irel., M.Ch.N.Univ.Irel., M.D.Univ.Jena, M.D.Korola-FerdinandeaUniv.Prague, M.D.Univ.Kiel, M.D.Univ.Köln(Cologne), M.D.Univ.Königsberg, M.D.Univ.Lausanne, D.P.M.Univ.Leeds, D.P.H.Univ.Leeds, M.D.Univ.Leeds, Ch.M.Univ.Leeds, M.D.Univ.Leipzig, M.D.Univ.Leyden, D.P.H.Univ.L'pool, D.M.R.(D.)Univ.L'pool, D.M.T.(T.)Univ.L'pool, D.T.M. & H.Univ.L'pool, M.D.Univ.L'pool, M.Ch.Orth.Univ.L'pool, M.Rad.Univ.L'pool, Ch.M.Univ.L'pool, Dip.Bact.Univ.Lond., D.C.P.Univ.Lond., D.P.M.Univ.Lond., D.P.H.Univ.Lond., D.T.M. & H.Univ.Lond., M.D.Univ.Lond., M.S.Univ.Lond., M.D.Univ.Lucknow, M.S.Univ.Lucknow, M.D.Univ.Madras, M.S.Univ.Madras, D.P.M.V.Univ.Manch., D.P.H.V.Univ.Manch., M.D.V.Univ.Manch., Ch.M.V.Univ.Manch., M.D.Univ.Marburg, M.S.(Rad.)Univ.Minnesota, M.D.Univ.München(Munich), M.D.Univ.Munster, M.Med.Univ.Natal, M.D.Univ.New Zealand, Ch.M.Univ.New Zealand, D.M.Univ.Oxon., M.Ch.Univ.Oxon., M.D.Univ.Patna, M.S.Univ.Patna, D.A.Univ.Pret., D.L.O.Univ.Pret., D.M.R.Univ.Pret., D.O.Univ.Pret., M.D.Univ.Pret., M.D.(Clin.)Univ.Pret., M.Med.(Anaes.)Univ.Pret., M.Med.(Derm.)Univ.Pret., M.Med.(Rad.D.)Univ.Pret., M.Med.(Int.)Univ.Pret., M.Med.(O. et G.)Univ.Pret., M.Med.(Ophth.)Univ.Pret., M.Med.(L. et O.)Univ.Pret., M.Med.(Paed.)Univ.Pret., M.Med.(Path.)Univ.Pret., M.Med.(Rad.)Univ.Pret., M.Med.(Chir.)Univ.Pret., M.Med.(Rad.T.)Univ.Pret., M.Ch.Univ.Pret., M.D.Univ.Punjab, M.S.Univ.Punjab, M.D.Univ.Rostock, M.D.Univ.Sheff., Ch.M.Univ.Sheff., D.P.H.Univ.St.And., M.D.Univ.St.And., Ch.M.Univ.St.And., M.D.Univ.Tübingen, M.D.Univ.Uppsala, M.D.Univ.Utrecht, D.P.H.Univ.Wales, M.D.Univ.Wales, M.Ch.Univ.Wales, T.D.D.Univ.Wales, D.A.Univ.Rand, D.C.H.Univ.Rand, D.Clin.Path.Univ.Rand, D.F.M.Univ.Rand, D.M.R.(D. & T.)Univ.Rand, Dip.Med.Univ.Rand, Dip.O. & G.Univ.Rand, D.O.M.S.Univ.Rand, D.Phys.Med.Univ.Rand, D.P.M.Univ.Rand, D.P.H.Univ.Rand, D.M.R.(T.)Univ.Rand, D.M.R.(D.)Univ.Rand, D.T.M. & H.Univ.Rand, Dip.Surg.Univ.Rand, M.D.Univ.Rand, Ch.M.Univ.Rand, M.D.Univ.Würzburg, M.D.Univ.Zürich.

(b) DENTISTS

Any degree, diploma or certificate recognized by the Council* in terms of section 22 or section 23 of the Act; and the following: F.D.S.R.C.S.Eng., H.D.D.R.C.S.Edin., D.D.O.R.F.P.S., Glasg., H.D.D.R.F.P.S., Glasg., M.S.D.North Western Univ., Chicago, M.D.S.Q.Univ.Belf., M.D.S.Univ.Birm., M.D.S.Univ.Brist., M.D.S.Univ.Durh., M.Dent.Sc.Univ.Dubl., M.S.(orthodontia)Univ.Illinois, M.D.S.N.Univ.Irel., M.Ch.D.Univ.Leeds, M.D.S.Univ.L'pool, M.D.S.Univ.Lond., M.D.S.V.Univ.Manch., D.D.Sc.Univ.Melb., D.P.D.Univ.St.And., M.D.S.Univ.Sheff., D.P.D.Univ.Rand., D.D.S.Univ.Rand, H.Dip.Dent.Univ.Rand., M.D.S.Univ.Rand.

* as entitling the holders thereof to registration under the Act.

OPENING OF RED CROSS WAR MEMORIAL CHILDREN'S HOSPITAL

In May 1945, when the world was still prostrate after the war, the Cape Region of the South African Red Cross Society at its Annual General Meeting decided that a Children's Hospital would form a fitting Red Cross Memorial to those who had contributed by sacrifice, suffering or service to the Allied victory.

The idea, which was welcomed by the Provincial Administration, who undertook to give a subsidy on the £ for £ basis, received widespread and immediate support from the public, who in the

following years subscribed £238,000 towards it. The original estimate of the cost of building was, however, affected by the general rise in building costs and was ultimately greatly exceeded, since the hospital itself, fully equipped, and the Nurses' Home adjoining, cost some £700,000.

It was designed by Mr. Brian Mansergh and Messrs. Lightfoot, Twentymann-Jones & Kent in association, and it stands at the edge of the Rondebosch Common, dominating the surrounding areas.

It is a hospital for the specialized treatment of children and it is not intended that it shall encroach upon the hospitalization of children in the general hospitals in the Peninsula. It provides 176 beds for European and non-European children, but its design allows for extensions in the future to accommodate double that number. Provision has also been made for the accommodation of 10 mothers, as well as for operating theatres, lecture rooms and a treatment block for non-resident patients.

By 29 February 1956 the hospital was complete and a formal ceremony was arranged by Red Cross to hand it over to His Honour the Administrator of the Cape Province. Mrs. W. A. Jolly, the Regional Chairman of Red Cross, accompanied by Mr. V. U. T. Watson, Chairman of the Red Cross Building Committee of the Hospital, met the Administrator and Mrs. Olivier on their arrival and conducted them to the dais. Mrs. Jolly then made a brief speech of welcome to the Administrator and Mrs. Olivier, Mr. Mortimer Moir (National President of Red Cross), and all present. This, she said, was a great day in the history of Red Cross. The memorial symbolised the love of man for man and one of the benefits emerging from the sorrow and tears of the war. She then formally introduced Mr. Watson, Chairman of the Building Committee.

Mr. Watson spoke briefly. The original idea, he said, was that Red Cross should raise £200,000 which, with a subsidy of £200,000 from the Provincial Administration, would provide sufficient money for the latter to build a Children's Hospital. In order,

however, to make it possible to start building without delay, Red Cross was asked by the Administration to assume responsibility for building, which it did. A special Red Cross Building Committee was appointed for the purpose with Mr. Watson as Chairman. He paid a warm tribute not only to the countless people who subscribed, but to all those who had helped on the Committee and in other ways. The purpose of the ceremony was to provide an opportunity to all who had helped the project to see what had been achieved through their help. Mr. Watson then handed to the Administrator a document of handing over, which records briefly the purpose of the Hospital and its evolution.

His Honour the Administrator, in officially taking over the Hospital from Red Cross, on behalf of the Provincial Administration and taking as his theme 'on the ruins of the past do we build the future', referred to the origin of the Hospital and the need for a specialist hospital for children in Cape Town. He pointed out that it would be used by the University of Cape Town for research work and that the new medical faculty of the Stellenbosch University would also make use of its facilities. He paid tribute to Red Cross for what it had done, and he said the Hospital would soon be officially opened.

Mr. Mortimer Moir, National President of Red Cross, also spoke briefly.

After the Hospital had been inspected tea was provided for the Administrator and Mrs. Olivier, the ceremonial party, and the public.

IN MEMORIAM

CORNELIUS MICHAEL RAUTENBACH

Cornelius Michael Rautenbach, who died recently in Pretoria a few days after an operation for a malignant condition, at which, unfortunately very little could be done, was born at Fouriesburg, OFS, in 1896.



Cornelius Michael Rautenbach

He was at school at Senekal and then proceeded to the Victoria College, Stellenbosch for 2 years. During 1918 he was at the University of Cape Town and in 1919 went to Edinburgh, where he graduated M.B., Ch.B. in 1922. For a few years before taking up medicine he had been a teacher. Both at Cape Town and at Edinburgh he represented his University at Rugby. He was evidently a redoubtable three-quarter, for he was known as 'Tank'.

After qualifying he was house surgeon to Sir David Wallace at the Edinburgh Royal Infirmary. Returning to South Africa, he practised at Ventersburg, OFS, in 1923 and 1924, when he moved to Bloemfontein, where he was in general practice until the time of his death. He was also a Railway M.O. for a good many years and served more than once on the Branch Council of the OFS and Basutoland Branch of the Medical Association of South Africa.

Dr. Rautenbach's other main interest was farming, in which he specialized in breeding cattle and horses. He achieved considerable success with percherons but latterly was more interested in breeding racehorses. He served the OFS Turf Club for some time also as a steward and seemed to have a great knowledge of the form and history of racehorses, although he maintained that he never punted heavily, if at all!

He must have concealed his symptoms for a considerable time, even from his family. Towards the end he certainly knew what was wrong, but displayed remarkable fortitude, so that his death came as a shock and a surprise to a large circle of friends, relatives and patients. To his widow, who is a sister of Drs. Otto and Emilia Krause, his 3 daughters and son and his aged mother his colleagues extend their sincere sympathy.

NEW PREPARATIONS AND APPLIANCES : NUWE PREPARATE EN TOESTELLE

Ansolsen and Vegolsen. Maybaker (S.A.) (Pty.) Ltd. announce that the *retard* solutions of Ansolsen and Vegolsen have been withdrawn and replaced with Ansolsen solution with ephedrine and Vegolsen solution with ephedrine. The reason for this is that polyvinylpyrrolidone, which is the retarding agent in the retard solutions, has been found to lead to neoplastic changes in a proportion of rats after injections continued over many months. The validity of these results is not certain, nor their significance in man. Nevertheless, as with Ansolsen and Vegolsen continuity of treatment may be necessary, it has been considered that the polyvinylpyrrolidone preparations should be withdrawn.

The new preparations contain the same quantities of hypotensive agents as those that have been discontinued, together with ephedrine to delay absorption from the site of injection. Other preparations of Ansolsen and Vegolsen will remain available without alteration.

POLIOMYELITIS IN THE UNION : STATEMENT BY THE MINISTER OF HEALTH

(From a Parliamentary Correspondent)

Although the incidence of poliomyelitis on the Witwatersrand is higher than is usual at this time of the year, the incidence of the disease in the country as a whole has been considerably less

this summer than it was last summer, says a statement issued by the Minister of Health, Mr. J. F. T. Naudé.

Mr. Naudé states that as a result of the relatively high incidence

on the Rand of the year Transvaal ponding p January.

During against notified in March 1-correspon In the than last (figures in parentheses

The appro adopted b

1. Fees fo

Johann Rest of Night throu West

2. Confir The fee that the c These f

Medical Cape Tow 22 March

RE

Refreshed the Medi 1956, and Practi the after strations from An Gener for inclu The appl of Medi

This sub African on 19-22 At the report o

* A n in next

on the Rand, where 163 cases have been notified since the beginning of the year until March 19, the incidence of poliomyelitis in the Transvaal is now considerably higher than it was at the corresponding period of last year, when the disease reached its peak in January.

During January, 31 cases were notified in the Transvaal as against 178 for the corresponding period last year, 84 cases were notified in February as against 105 in 1956, while for the period March 1-19, 85 cases were notified compared with 33 for the corresponding period last year.

In the rest of the country the incidence has remained lower than last year as will be observed from the following figures (figures in respect of the corresponding periods last year are given in parenthesis):

	Cape Province	Natal	Free State
January 1956	16 (58)	20 (101)	7 (27)
February 1956	24 (45)	20 (80)	8 (8)
March 1-19, 1956 ..	10 (9)	3 (18)	9 (10)

The Minister states that the type of the disease this year is generally mild and where cases of paralysis have occurred, they are less severe than those of last year. Experience has shown that the disease generally becomes much less prevalent with the onset of cooler weather and it is hoped that this will again be the case this year.

OFFICIAL ANNOUNCEMENT : AMPTELIKE AANKONDIGING

MEDICAL AID SOCIETIES

The approved Medical Aid Societies have accepted the revised fees adopted by Federal Council in October 1955.

1. Fees for General Practitioners.

	Visits	Consultations
Johannesburg	17/6	15/-
Rest of Union and South West Africa	15/-	12/6
Night calls (7 p.m. to 7 a.m.)— throughout the Union and South West Africa		23/6

2. Confinement Fee for Specialists.

The fee is £18 18s. 0d. for a normal confinement, on condition that the case is referred to the specialist by a general practitioner. These fees will become operative as from 1 April 1956.

L. M. Marchand
Associate Secretary

Medical House,
Cape Town,
22 March 1956.

MEDIESE HULPVERENIGINGS

Die erkende Mediese Hulpverenigings het die gewysigde gelde aanvaar wat deur die Federale Raad in Oktober 1955 goedgekeur was.

1. Gelde vir Algemene Praktisyne

	Besoëke	Konsultasies
Johannesburg	17/6	15/-
Die res van die Unie en Suid-Wes Afrika	15/-	12/6
Nagoproë (7 nm. tot 7 vm.)—vir die hele Unie en Suid-Wes Afrika		23/6

2. Spesialistegelde vir Kraamgevalle

Die bedrag is £18 18s. 0d. vir 'n normale bevalling, op voorwaarde dat die geval deur 'n huisdokter na die spesialis verwys is. Hierdie gelde is van toepassing met ingang 1 April 1956.

L. M. Marchand
Medesekretaris

Mediese Huis,
Kaapstad
22 Maart 1956.

REFRESHER COURSES FOR GENERAL PRACTITIONERS : OPKNAPPINGSKURSUSSE VIR ALGEMENE PRAKTISYNS

Refresher Courses for general practitioners will be conducted by the Medical Faculty of the Pretoria University from 16 to 20 April 1956, and from 13 to 18 August 1956.

Practitioners will be taken on ward rounds in the mornings and the afternoons and evenings will be devoted to lectures, demonstrations and discussions, the course to embrace the whole Faculty from Anatomy and Physiology to Medicine.

General practitioners are requested to send their applications for inclusion in the 16-20 April course on or before 12 April 1956. The applications should be addressed to: The Dean of the Faculty of Medicine, University of Pretoria, P.O. Box 667, Pretoria.

Opknappingskursusse vir algemene praktisyne is deur die Fakulteit Geneeskunde van die Universiteit Pretoria gereël om van 16 tot 20 April 1956, en van 13 tot 18 Augustus 1956, plaas te vind.

Die plan is om die praktisyne in die oggende op saalrondes mee te neem en in die middag en aande lesings, demonstrasies en besprekings te hou. So 'n kursus sal die hele fakulteit insluit, van Anatomie en Fisiologie tot by Interne Geneeskunde.

Algemene praktisyne word gevra om hulle aplikasies vir die eerste kursus, d.w.s. 16-20 April 1956, op of vóór 12 April 1956 in te dien. Aansoeke moet gerig word aan: Die Dekaan van die Mediese Fakulteit, Universiteit Pretoria, Posbus 667, Pretoria.

REGISTRATION OF SPECIALITIES

This subject was further considered at the meeting* of the South African Medical and Dental Council which was held in Cape Town on 19-22 March.

At the previous meeting of the Council (September 1955) the report of an *ad hoc* committee on this subject was considered,

* A report on the proceedings of this meeting will be published in next week's issue.

when the voting on the committee's recommendation that a register of consultants should be instituted to replace the 'register of specialists' in (say) 5 years was equal (10:10). The whole issue was then referred back to a new *ad hoc* committee consisting of the President (Professor Oosthuizen), Drs. Black, Bloom, C. Shapiro and Wagner, and Mr. Rood.

At the present meeting the report of the new *ad hoc* committee was presented. The committee had had before it the results of the

questionnaire of 1954 and the interpretation of these results by the Federal Council of the Medical Association (March 1955), which was that (a) a majority of the voters were in favour of some sort of register, (b) a majority favoured a register of consultants, (c) a majority favoured a statutory register, and (d) an overwhelming majority felt that specialists or consultants should not make domiciliary visits except in consultation or in cases of emergency. The resolutions of the committee as now submitted to the Council were as follows:

'It was resolved to recommend that a statutory register of specialists be maintained but that rules be drafted to place certain restrictions on the actions of specialists in an attempt to remove some of the causes of friction between specialists and general practitioners, in the interests of both these classes of medical practitioners and also of the public.

'It was further resolved to recommend that:

- (i) specialists shall not do domiciliary visiting except when requested to do so by a general practitioner;
- (ii) that if a specialist becomes cognisant of the fact that the patient has a general practitioner, it is incumbent on him to report to the general practitioner;
- (iii) that it is incumbent on a specialist to refer a patient to his general practitioner for the ordinary routine treatment which is customarily administered by a general practitioner and in this connection the specialist must satisfy himself as to whether the patient has a general practitioner

treating him; if he is satisfied that the patient is not under the treatment of a general practitioner he may continue to treat the patient himself and he may also continue to treat the patient if he is requested to do so by a general practitioner.

'It was further recommended that the Council considers the principles contained in the above and if it agrees to these principles, that the matter be referred back to this Special *Ad Hoc* Committee to deal with matters of detail'.

Considerable debate ensued, at which the arguments were again put forward that have been heard on many occasions in the past few years. Amendments were proposed which would have the effect of replacing the register of specialists by one of consultants or by a register of specialists who would be required to practice only as consultants. These amendments were lost, and the first portion of the *ad hoc* committee's resolution passed, by majorities of 18:5 and 25:5 (the words 'a statutory register of specialists' were replaced by the words 'statutory registration of specialities').

The remainder of the committee's resolutions, viz. recommendations (i), (ii) and (iii), to which a fourth was added, viz. (iv) that it is incumbent on a specialist to ascertain from any patient who comes to him direct whether he has a general practitioner, were referred back to the *ad hoc* committee for consideration and report.

The final decisions of the Council, when passed, will be submitted as recommendations to the Minister of Health.

PASSING EVENTS : IN DIE VERBYGAAN

The Public Relations Department of the British Medical Association, BMA House, London, W.C. 1., has published a list of medical congresses to be held throughout the world during the year 1956. Information from the list may be obtained on application to the South African Medical Journal offices, P.O. Box 643, Cape Town.

* * *

The International Congress of Gastroenterology (the 5th Meeting of the Association des Sociétés Européennes et Méditerranéennes de Gastro-Entérologie) President Dr. Thomas Hunt, D.M., F.R.C.P., will take place on 18-21 July 1956 at the Royal College of Surgeons, Lincoln's Inn Fields, London, W.C. 2. Subjects for discussion: (1) Ulcerative colitis, (2) Pre-Malignant Conditions of the Gastro-Intestinal Tract, (3) Non-Malignant Diseases of the Oesophagus, (4) Short Papers. Simultaneous interpretation will be provided in English, French, German and Spanish.

A scientific demonstration will be arranged (exhibits to be forwarded not later than 1 May 1956) and an exhibition of pharmaceutical products, medical books and appliances. The social functions, for which there will be no charge, include receptions by the University of London and the Royal College of Physicians, London, a Congress Banquet at the Guild Hall; visits to the Royal Mint, the National Gallery, the Wallace Collection, the Royal Mews, the Tower of London, a tour of London Docks by water, visits to Hampton Court, Windsor Castle, and the colleges of the Universities of Oxford and Cambridge.

Registration fees will be £10 for full members and £6 for social members. An additional late fee of £2 will be charged after 1 May.

The Congress offices are at The London Hospital, Whitechapel, London E1.

* * *

The National Group of Neurologists, Psychiatrists and Neuro-Surgeons recently held a Scientific Meeting in Cape Town, extending over 2 full days on 8 and 10 March 1956. The 1st day was devoted to Psychiatry and the following papers were read: Dr. F. R. Ames—Pharmacologically induced Psychoses. Dr. J. McGregor—Pharmacotherapy of Mental Illness. Dr. M. Russel Clarke—Intravenous methedrine in Psychiatry. Dr. Du Plessis—Atarax in Psychiatry.

During the afternoon, the staff of Valkenberg Hospital presented an interesting series of cases, and this was followed by an open discussion on the present status of Psychosurgery.

On the 2nd day of the meeting, the following papers on neurological and neurosurgical subjects were read: Mr. de Villiers Hammann—Pallidotomy. Mr. A. Gonski—Inflammatory Lesions

compressing the Cord. Mr. H. Mendelow—Parasitic Infestations of the CNS. Dr. N. F. S. Proctor—The Pathology of Infestations of the CNS. Mr. E. Kerr—Ventriculography with positive contrast. Dr. M. K. Wright—The Physiological Basis of Consciousness. Dr. J. McGregor—Atypical Facial Pains.

The meeting was concluded with a Case Conference at which a series of neurological cases of special clinical interest were presented for discussion.

The meeting was well attended and proved an unqualified success. In addition to being most enjoyable and instructive, a meeting such as this serves the purpose of establishing an invaluable liaison between group members domiciled in the widely dispersed centres of the Union.

* * *

South African Society of Medical Women. The Extraordinary General Assembly of the Medical Women's International Association will be held at Burgenstock, Switzerland, from 20-23 September. The Swiss Association has arranged for many excursions to be available to members who would like to take advantage of them, either before or after the Congress. Further particulars and application forms may be obtained from Dr. I. Robertson, 'Allandale', Main Road, Claremont, C.P.

* * *

The Medical Women's International Association have enquired whether there is any South African member who would be able to represent them at the meeting of the Regional Committee for Africa of the World Health Organisation to be held at Luanda, Angola, from 24-25 September 1956. Any member who is interested should write to Dr. I. Robertson, 'Allandale', Main Road Claremont, C.P.

* * *

Dr. Cyril Toker, of Johannesburg, who recently left to do post-graduate study overseas has been awarded the Hallett Prize in the Primary F.R.C.S. (Eng.).

* * *

Welfare of the Aged. The National Welfare Organizations Board announces that the following publications concerning the welfare of the aged are available: (a) 'Handbook on the Care of the Aged in Homes', issued by the Research Section of the Department of Social Welfare, obtainable from the Government Printer, Bosman Street, Pretoria, and P.O. Box 571, Cape Town (price not yet fixed). (b) Report of the National Conference on the Welfare of the Aged.

Cape Town, 5-7 October, 1955, obtainable from Mrs. Z. Steyn, 'Kom Nader', Scouts Place, Pinelands, Cape Town (price 7s. 6d.).

* * *

Dr. J. Levin, M.B., Ch.B., B.Sc., D.A., of Cape Town, has been appointed as Anaesthetist in the Thoracic Surgical Unit of St. George's Hospital, London.

* * *

Central News Agency Staff Medical Benefit Society. Aanstelling in Mowbray-gebied. Die Raad van die Tak Wes-Kaapland deel aan belangstellende geneeshere mee dat, aangesien hierdie mediese bystandvereniging toegestem het dat hierdie aanstelling die beginsel van 'n ope lys sal volg, die aanstelling nou deur die Takraad goedgekeur is.

* * *

Central News Agency Staff Medical Benefit Society Appointment in Mowbray Area. The Council of the Cape Western Branch advises interested practitioners that as this Medical Benefit Society has agreed that this appointment shall operate as an open panel, the appointment is now approved by Branch Council.

* * *

Union Department of Health Bulletin. Report for the 7 days ended 15 March 1956.

Plague. Smallpox. Typhus Fever. Nil.

Epidemic Diseases in Other Countries.

Plague: Nil.

Cholera in Calcutta (India); Chalna, Dacca (Pakistan).

Smallpox in Kabul, Kandahar (Afghanistan); Moulmein, Rangoon (Burma); Bombay, Calcutta (India); Chalna, Dacca (Pakistan); Saigon-Cholon (Viêt-Nam).

Typhus Fever: Nil.

* * *

Cape Town Paediatric Group. The next meeting of the Cape Town Paediatric Sub-group will be held on Friday, 13 April 1956 at 8.15 p.m. in the E-Floor Lecture Theatre, Groote Schuur Hospital. Dr. W. L. Phillips will give an address on *Six unusual cases*.

* * *

Research Forum, University of Cape Town: The date of the next meeting of the Research Forum has been changed from 3 April to 10 April, and will be held at 12 noon in the A-Floor Lecture Theatre, Groote Schuur Hospital, Cape Town. *Speaker* Dr. L. Eales. *Subject* 'Nora'—example of the new adrenal syndrome.

REVIEWS OF BOOKS : BOEKRESENSIES

ADDENDUM TO BRITISH PHARMACOPOEIA

Addendum 1955 to the British Pharmacopoeia 1953. Published under the Direction of the General Medical Council Pursuant to the Medical Council Act 1862 and the Medical Act 1950. Official from March 1, 1956. Pp. 94 + xvii. 21s. 0d. London: The Pharmaceutical Press.

Contents: I. Monographs. Appendices. Index.

The advances in therapeutics and pharmaceuticals and in the chemical and biological sciences have been so tremendous in modern times that not only has a complete new edition of the British Pharmacopoeia been published after an interval of 5 years, but an Addendum is issued between the publication of the editions. In this Addendum there are 56 new monographs on drugs and preparations, and amendments to numerous existing monographs of the B.P. 1953; changes have also been made in the appendices of the Pharmacopoeia.

The monographs now included deal with Carbimazole (antithyroid), Chloroquine Phosphate and Sulphate (antimalarial), Diethylcarbamazine Citrate (anthelmintic), Hexamethonium Tartrate (ganglion blocking agent), Gallamine Triethiodide and Suxamethonium Chloride (muscle relaxants), Primidone (anticonvulsant), Lignocaine Hydrochloride (local anaesthetic), Iopanoic Acid (for cholecystography), Phenindione and Dextran Sulphate (anticoagulants), Nalorphine Hydrobromide (morphine antagonist), Cortisone Acetate, Corticotrophin, Insulin Zinc Suspensions; Ferrous Gluconate; Methylamphetamine Hydrochloride; Oxytetracycline Dihydrate, and the Hydrochloride for injection; Phenylbutazone.

N.S.

A NEW TEXT-BOOK OF OPHTHALMOLOGY

Ophthalmology. A Textbook for Diploma Students. By Patrick D. Trevor-Roper, M.A., M.B., B.Chir. (Cantab.), F.R.C.S., D.O.M.S. (Engl). Pp. 656 + xii with illustrations. 75s. 0d. London: Lloyd-Luke (Medical Books) Ltd. 1955.

Contents: Part I—Anatomy. 1. The Eyeball. 2. The Bony Orbit, Lids and Lacrimal Apparatus. 3. The Muscles and Vessels of the Eye. 4. The Peripheral Nerves and Central Nervous Connections. 5. Embryology. Part II—Physiology. 6. The Intra-Ocular Fluids. 7. The Intra-Ocular Structures. 8. The Extra-Ocular Structures. 9. The Effect of Light on the Eye. 10. Colour Vision. 11. Visual Sensations. 12. The Central Mechanism of Vision. Part III—Optics. 13. Reflection and Refraction. 14. Refraction in the Normal Eye. 15. The Abnormally Refracting Eye ('Refractive Errors'). 16. The Estimation and Correction of Refractive Errors. 17. Methods of Inspection. Part IV—Diseases of the Outer Eye. 18. Squint. 19. Diseases of the Orbit. 20. Diseases of the Lacrimal Apparatus. 21. Diseases of the Eyelids. 22. Conjunctiva. 23. The Cornea and Sclera. 24. The Treatment of External Diseases. Part V—Diseases of the Inner Eye. 25. The Lens. 26. Glau-

coma. 27. The Uveal Tract. 28. The Retina. 29. Diseases of the Visual Pathways Index.

Postgraduate students seeking ophthalmic diplomas (such as the London D.O.) have long felt the need for a text-book standing midway between Duke-Elder's *Textbook of Ophthalmology*—too massive and encyclopaedic—and the short handbooks—more suitable for the undergraduate. That gap has now been adequately bridged by one of the younger London ophthalmologists, Mr. Trevor-Roper, who is associated with Moorfields, and the Institute of Ophthalmology, London.

Elegantly written, profusely illustrated with effective photographs and diagrams, this book is an excellent introduction and a sound foundation for anyone contemplating ophthalmology as a speciality. Anatomy, Physiology and Optics receive far more adequate consideration than usual, and so well are they done that these sections alone will make the book essential for the student. The other sections, too, are exceedingly well done, although in such a short book one can naturally find an occasional omission or deficiency.

The author tells us that the need for brevity has imposed a didactic and dogmatic diction: this will be welcomed by the student. But I suspect this may have been an even better book had the author not eschewed, in the interests of brevity, all the discursive forays and elegant elaborations which had slid into the early drafts.

The changing patterns of disease, and the revolution produced by the antibiotics, are shown by the interesting fact that gonococci have been isolated from the conjunctiva in only one case out of over 30,000 cultures taken at the Institute of Ophthalmology during the past 5 years.

Mr. Trevor-Roper can congratulate himself on his fine achievement. His is an admirable book with teaching up-to-date and most acceptable.

S. Abel

THE BRAIN

The Human Brain. By John Pfeiffer. Pp. 266. 16s. London: Victor Gollancz Ltd. 1955.

Contents: 1. Introducing the Brain. 2. Man's Evolving Brain. 3. From Birth to Old Age. 4. Pathways of Emotion. 5. The Brain in Focus. 6. Remembrances of things past. 7. Memory and the Higher Faculties. 8. Cells in Rhythm. 9. Sick Brains. 10. How we feel pain. 11. The Sacred Disease. 12. The Riddle of Neurosis. 13. A Visit to Manteno. 14. The Rise of Psychosurgery. 15. Brain Operations with Needles. 16. Chemistry and Mental Disease. 17. The Most Complicated Machines. 18. The Thinking Machine. Bibliography. Index.

This book is a mixture of crisp, readable, factual writing and highly coloured, forceful, cartoon-like descriptions of modern

concepts about the cerebrum. It does not attempt to be a popular guide to the physiology and anatomy of the brain but it does present in a very vivid manner a great deal of information about common cerebral processes, mental disorders, psychosomatic interrelationships, and physical forms of therapy in the neuroses and psychoses. While the first half of the book might be irritating to the medical reader because of its emphatic 'digest' tone, the second half gives a good popular review of such matters as electroconvulsive therapy, stereotaxis and cybernetics, and peeps at the chemical basis of certain mental processes.

Many of the case-histories are illuminating and fascinating, but one regrets that medical references are not given to them. It is said, however, that each chapter has been 'vetted' by an expert, and certainly no inaccuracies could be found in the general text; so that one may assume that these histories are genuine—the only one that could be traced with certainty was exact in general outline.

This kind of writing has become familiar to those who read the better American periodicals and the continual sugar-coating with baseball figures of speech can be swallowed quite easily, even by those not accustomed to such administrations. The pill is thoroughly invigorating and most medical men would be the better for an occasional tonic course of this kind of book to help them to have a more balanced and secular view of a subject which is too often obscured by medical clichés and terminological shutters. The work is a fine, racy account of something with which we should be more familiar and use more often—our brains.

J. MacW. MacG.

SURGERY OF THE ALIMENTARY TRACT

Bickham-Callander Surgery of the Alimentary Tract. Volumes I, II and III. By Richard T. Shackelford, M.D. Pp. 2575, with 1,705 illustrations. £21 12s. per set of 3 volumes. Philadelphia and London: W. B. Saunders Company. 1955.

Contents: Volume I. 1. The Esophagus. 2. The Stomach and Duodenum. 3. The Liver. 4. The Gallbladder and Extrahepatic Biliary Ducts. *Volume II.* 5. The Pancreas. 6. The Spleen. 7. The Small Intestine (Jejunum and Ileal Portions). 8. The Peritoneum, Omentum and Mesentery. 9. The Colon. *Volume III.* 10. The Anorectal Tract. 11. Excisions of the Rectum. 12. Hernia of the Gastrointestinal Tract. 13. Incisions. Index to Volumes, I, II and III.

This work, spread over 2,500 pages in 3 beautifully produced volumes, presents the subject very thoroughly. In the preface Dr. Shackelford explains how the present work is derived from the original 'Bickham' which was a monumental work in 6 volumes. Callander, of 'Surgical Anatomy' and 'Tendo-plastic Amputation above Knee' fame, revised Bickham for a 2nd edition, but died before it was completed. Shackelford undertook to review Callander's material on the digestive system, tie up the loose ends, and publish it as a 2-volume work on 'Surgery of the Alimentary Tract' in a year. The work took him 6 years and spread to 3 volumes. After perusing the books it is easy to believe this. This work has been done with meticulous care, and immense pains have gone into its production. The breadth of the author's researches is well reflected in the fullness of the bibliographies given at the end of each section. Here it is refreshing to see that the author has not followed the custom so prevalent amongst his countrymen of using only references from the New World.

In volume I the section on stomach and duodenum is very full and satisfying. That on the biliary tract is especially good. The presentation is very lucid and includes many practical points which will make it worthy of study even for the experienced surgeon.

In volume II the section on congenital anomalies merits special mention and the author acknowledges that much of the material has been taken from Gross' recent work. He could not have chosen a better source from which to cull.

Volume III deals very adequately with the ano-rectal tract, and also has a section on Hernia. In this it is pleasing to see that Allison's work on diaphragmatic hernia has been accorded proper recognition.

With most books which aim at a complete presentation of a subject one cannot help feeling that certain parts could have been omitted because the procedures described are of doubtful value or have become obsolete. In this work, however, the author has added to his description of the operation a comment assessing its value in his opinion: the comments show how experienced and sound his judgment is.

The surgery of the digestive system has made great strides in the last decade and this book is 'up to the minute' rather than 'up to date'. The detailed contents are excellently set out, so that a particular subject is very easily located. The illustrations are plentiful and good; the paper and general presentation are of the splendid quality one has come to associate with Saunders' products. All in all, this work must carry a very warm commendation for all general surgeons—this being that branch of surgery to which the digestive tract has been left.

P.C.W.M.

DISORDERS OF THE AUTONOMIC NERVOUS SYSTEM

Management of Disorders of the Autonomic Nervous System. By Louis T. Palumbo, M.D. Pp. 186, with illustrations. \$5.00. Chicago: Year Book Publishers, Inc. 1955.

Contents: 1. Clinical Gross Anatomy. 2. Clinical Physiology. 3. Clinical Pharmacology. 4. Clinical Tests and Changes Following Surgery. 5. The Extremities. 6. The Cardiopulmonary System. 7. Hypertension. 8. The Gastrointestinal Tract. 9. The Genitourinary Tract. 10. The Head and Neck. References. Index.

There is certainly a need for a short, not too technical, book on the Autonomic Nervous System, written at the non-specialist level, but after reading this book by Dr. Palumbo one still feels this want. The author has largely failed, by taking too exclusively surgical a viewpoint. He ranges fully through the disorders of the autonomic system but he has obviously scant interest in certain subjects, such as the treatment of cerebro-vascular accidents and various cephalalgias. With some disorders such as Causalgia and Phantom Limbs he has nothing to offer other than surgery, although he does make a passing reference to patients often resorting to narcotics and herb-healers. His best section is on the treatment of hypertension, where he gives a good, brief summary of drug therapy and contrasts it with surgical treatment, giving percentages of success and failure in the various modes of attack.

The photographs of disturbances of sweating after sympathectomy are excellent and the use of an iodine and castor-oil paint in this test seems very much simpler than that of some of the dye preparations.

There is a full bibliography at the end of the book but as it is not related to the individual chapters it is almost impossible to find the relative references.

This book is well bound and printed on good paper but it is expensive for its size and it is a great pity that its author has lost, by his tautology and vagueness, an opportunity for clarifying the treatment and management of autonomic disorders.

J. MacW. MacG.

NEUROLOGY AND NEUROPSYCHIATRY

Recent Advances in Neurology and Neuropsychiatry. Sixth Edition. By Sir Russell Brain, Bt. D.M. (Oxon.), P.R.C.P. and E. B. Strauss, M.A., D.M. (Oxon.), D.Sc., F.R.C.P. Pp. 311 + x, with illustrations. 30s. 0d. London: J. & A. Churchill Ltd. 1955.

Contents: 1. The Frontal Lobe and the Organization of Movement. 2. The Frontal Lobe—Mental Aspects. 3. The Temporal Lobe. 4. The Parietal Lobe and Sensation. 5. Consciousness and Unconsciousness. 6. The Cerebellum and its Disorders. 7. Poliomyelitis and the Cocksack Disease. 8. Demyelinating Disorders. 9. The Intervertebral Disc and Spondylosis. 10. The Cerebral Circulation. 11. Miscellaneous Clinical and Therapeutic Advances. 12. Electro-Encephalography. 13. Neuroradiology. 14. Intracranial Tumours.

With the voluminous increase in medical literature it is becoming more and more difficult for even the expert to keep up with his subject, and indeed matters have reached a stage when it is becoming almost impossible to keep pace with the digests, excerpts, year-books and compendia that appear on special or general subjects. This is not to say that these various periodical reviews are to be rejected; they are essential for most of us as guiding posts; but it does mean that one must select a certain type of direction-finder to avoid being hopelessly lost in the bogs of medical writing.

The Recent Advances series has a special place amongst resums, for they give us the considered views of leading experts on their own subjects; furthermore they do not appear at too frequent intervals. It is a great advantage to see at roughly 5-yearly intervals what the general trends have been in various subjects.

This present edition has two new contributors, Dr. Denis Hill and Dr. David Sutton, both of whom can be congratulated on their contributions. Mr. Northfield gives us one of his concise,

though rather dry, reviews of recent neurosurgical work. The whole book with its wide, sane and balanced outlook over subjects as different as Consciousness and Cerebellar Physiology, Psychomotor Epilepsy and Spondylosis, is one which, in the words of the cliché, we shall all be pleased to have on our bookshelves. It is sometimes amusing to make the desert-island choice in books—the reviewer would unhesitatingly pick on this new edition of an old favourite if he were limited to one volume of the review type, whether on an atoll or in a metropolis.

This is a book for the general clinician, edited by clinicians, and that is something which cannot be said of many books with a similar format.

J.MacW.MacG.

CLINICAL BIOCHEMISTRY

Clinical Biochemistry. By Abraham Cantarow, M.D. and Max Trumper, Ph.D. Fifth Edition. Pp. 738 + xxi, with 54 illustrations. \$9.00. Philadelphia and London: W. B. Saunders Company. 1955.

Contents: 1. Carbohydrate Metabolism. 2. Lipid Metabolism. 3. Protein Metabolism. 4. Nucleic Acid Metabolism. 5. Metabolism of Hemoglobin and Porphyrins. 6. Biochemical Aspects of Diet. 7. Calcium and Inorganic Phosphate Metabolism. 8. Phosphate Activity. 9. Magnesium Metabolism. 10. Iron Metabolism. 11. Sulfur Metabolism. 12. Iodine Metabolism. 13. Sodium, Potassium and Chloride Metabolism. 14. Water Balance. 15. 'Acid-Base' (Anion-Cation) Balance (Neutrality Regulation). 16. Respiratory Exchange and Basal Metabolism. 17. Hormone Assay and Endocrine Function (with A. E. Rakoff). 18. Vitamins. 19. Chemical Investigation of Gastric Function. 20. Pancreatic Function. 21. Hepatic Function. 22. Renal Function. 23. Cerebrospinal Fluid. Index.

The intelligent practice of medicine cannot be undertaken today without an understanding of basic biochemistry. This text-book is particularly valuable, because it provides this knowledge, whilst it observes a strictly clinical approach to the subject.

Many chapters in this new edition have been completely rewritten to include the numerous facts which have emerged in the past 5 years. However, the general form and attractive layout of the previous edition has been retained. The chapter on Acid-Base Regulation still forms a remarkable elucidation of this important but complex subject.

In the consideration of Hypercalcuria, two common causes are omitted: Sarcoidosis is not mentioned, nor is the administration of Cortisone. The latter is an unfortunate omission, since the hypercalcuria may be prevented by appropriate therapy. In their discussion on Haemochromatosis, the authors apparently do not accept increased iron-absorption as the basic metabolic fault.

CORRESPONDENCE : BRIEWERUBRIEK

USE OF LARGACTIL IN CYCLICAL VOMITING

To the Editor: Before using this drug, I have had to have several children with cyclical vomiting hospitalized for replacement of fluid loss. The vomiting had not been controlled by intramuscular phenobarbitone, etc.

I am pleased to state that since I have been using Largactil by intramuscular injections, in dosage of 5-15 mg. when the vomiting started, all the children have settled down. This dose usually produces sleep for a period of 4-8 hours, and when the child awakens fluids are kept down and the child speedily recovers. I have not had any cases of jaundice following this single dose of Largactil. I should be interested to hear whether any other practitioners have tried this drug.

G. J. Budow

52 Voortrekkerweg
Goodwood
Cape
10 March 1956.

THE LEYDEN TRADITION IN SOUTH AFRICAN MEDICINE

To the Editor: I very much enjoyed the excellent article by Dr. Burrows' under this title—the more so since in these days of independence we are apt to forget what we owe to Holland, a small country from which we South Africans derived not only the

The dismissal of tri-iodo-thyronine in a line illustrates the author's unwillingness to accept a new development until it has become well established.

However, these are minor criticisms and the volume is enthusiastically recommended to all who seek instruction in this difficult field.

R.H.

A BILINGUAL JOURNAL IN HEBREW AND ENGLISH

Harofé Haivri, the Hebrew Medical Journal. Editor, Moses Einhorn, M.D. Vol. 2, 1955. Pp. 156+advertisements pp. 107. The Hebrew Medical Journal, 983 Park Avenue, New York 28, N.Y.

This journal has issued 2 numbers in 1955. It is written in Hebrew, with English summaries, and has played an important part in the creation of a medical literature and terminology in Hebrew. Vol. 2 of 1955 contains 71 pages of text in Hebrew, 78 in English and 7 in both languages. It comprises the following:

I. *Israel and Health:* 'Mortality in Israel' by Dr. Gertrude Kallner, of the Israel Government Bureau of Statistics, Jerusalem; 'Speech Disorders in Israel and Abroad' by J. Zylkewicz, M.D., Tel Aviv; 'Problems of Jewish Demography' by A. Spruch-Poisner, M.D., Tel Aviv; 'Dentistry in Israel and the School of Dentistry of the Hebrew University' by I. Seifert, D.D.S., Israel; and 'First Scientific Medical Institute in Palestine' by S. J. Plashkes, M.D.

II. *Maimonides (Moshe ben Maimon)—Rambam—750th Anniversary:* 'The Art of Cure—A non-published Medical Book of Maimonides' by U. Barzel, M.A., B.S., Israel.

III. *Historical Medicine:* 'Jewish Medicine from the Historical Viewpoint' by A. Goldstein, M.D.

IV. *Bible and Medicine:* 'Endocrinology in the Bible' by J. Taub, M.D., Assistant Professor of Pathology, New York Medical College.

V. *Religion and Medicine:* 'The Physician in Jewish Law and Religious Literature' by I. Jakobovits, B.A., Ph.D., Chief Rabbi of Ireland.

VI. *Personalia:* 'Abraham Levison, M.D.' by S. J. Zakon, M.D., Professor of Dermatology, Northwestern University, Chicago.

VII. *Book Reviews:*

VIII. *Medical and Pharmaceutical News.* A collection of great value especially to those interested in the Hebrew language, history and culture.

T.S.H.

founding of our country but also the background of our culture in the fields of law, literature, religion and education.

The teaching of medicine at Leyden reached its pinnacle during and after the regime of that great physician of the time, viz. Boerhaave, who was the first professor to introduce clinical teaching at the bedside. Up to his time physicians were essentially very learned people (as they still are), dressed in the height of fashion of the time (we still see this, too), who, however, did not deign to touch a patient and employed an understudy to examine the sick. Boerhaave's methods of teaching were revolutionary for those times and students flocked to Leyden from all over the world. Indeed, the fame of Leyden's medical teaching spread to such an extent that up to the middle of the 19th century the leading medical teachers of English and Scottish universities had to have a Leyden degree to get a post, and in the medical library of the University of Cape Town there can still be found a booklet with a full list of names of Leyden medical graduates of English extraction.

The Austrian Empress Maria Theresa, desperate at not yet having produced an heir after several years of marriage, sent an emissary to Boerhaave to request him to send her a 'really good doctor'. The answer was one of Boerhaave's assistants, viz. van Zwieten who became court physician to the Empress. She soon after fell pregnant, and subsequently produced not one heir but ten, all of whom were married off to members of various royal houses of Europe of the time. History does not mention van Zwieten's methods for achieving this gynaecological and political victory. Suffice it to say that the Empress was so grateful that she gave him

carte blanche to build the University of Vienna on the Leyden model, with the result that Vienna was soon a close rival to Leyden.

Leyden University is not on the decline; on the contrary it is going from strength to strength, thanks to the fact that Indonesia is closing its doors to the European pioneers and more talent is therefore available for Dutch universities. Over the past 25 years all the teaching is done at the newly-built Boerhaave group of clinics, mostly by pupils of this century's great Leyden teachers like Einthoven (inventor of the electrocardiograph), Storm van Leeuwen (pioneer of research on allergy), Zaayer (contemporary and co-worker with Sauerbruch on chest surgery, and the first surgeon to successfully reconstruct the oesophagus), Snellen of best-seller fame, and his successor van der Hoeve.

Amongst ex-students Leyden counts H.M. Queen Juliana of the Netherlands and, even at this day, many South Africans well known in the fields of law, politics and medicine—one of whom modestly forbids me to mention by name.

Willem P. Steenkamp, Jr.
Arts (Leyden)

S.A. Mutual Buildings
Cape Town
18 March 1956

1. Burrows, E. H. (1956): S. Afr. Med. J., 30, 257.

RELAXANTS IN ANAESTHESIA

To the Editor: If you will allow me further space I should like to answer Dr. Jones's request¹ for comment on 4 cases of cardiovascular collapse following injection of the short-acting relaxant succinyl-choline chloride reported by Johnstone.² The young men were described respectively as a healthy robust labourer, a very fit professional footballer, a healthy robust labourer and a healthy well-developed labourer. All of them without any pre-operative sedation, and 2 of them without pre-operative atropine, were given small and in view of their robustness probably inadequate doses of thiopentone. This was followed by a small, again probably too small, dose of succinyl-choline chloride, namely 60 mg.

I have previously reported³ from clinical trials that the dose of succinyl-choline chloride should be 0.5 mg. per lb. body-weight, and it is unlikely that any of these robust well-developed patients weighed as little as 120 lb. In the same article I pointed out that intubation with inadequate doses of this drug sometimes initiated unpleasant cardiac reflexes. The same result may follow a painful stimulus such as manipulation of the ankle. My belief is that these 4 patients suffered an ordinary vaso-vagal attack caused by some strong stimulus while they were inadequately anaesthetized and inadequately 'curarised'. In other words, the trouble was due not to the drugs but to the lack of them. The fact that all 4 patients made an excellent recovery, one spontaneously and the other 3 after intravenous atropine, would seem to confirm my opinion.

I should like to draw Dr. Jones's attention to an excerpt from further on in Dr. Johnstone's article.⁴ Referring to Beecher and Todd, he says: 'These workers were of the opinion that the increased death rate was due to "an inherent toxicity of the relaxants" which caused cardiovascular failure. It appears more likely to the writer, however, that the cardiovascular collapses of the type referred to by Beecher and Todd are related to the narcotic agents used in conjunction with the relaxants.'

F. W. Roberts

309 Harley Chambers
Jeppe St.
Johannesburg
10 March 1956

1. Jones, C. S. (1956): S. Afr. Med. J., 30, 204 (25 February).
2. Johnstone, M. (1955): Anaesthesia, 10, 122-138 (p. 128).
3. Roberts, F. W. (1952): S. Afr. Med. J., 26, 636. (2 August.)
4. Johnstone, M. (1955): *Op. cit.*, p. 136.

PUBLICITY IN THE PUBLIC PRESS

To the Editor: Mr. G. R. Crawshaw¹ in his letter to the *Journal* of 17 March appeals to all editors of newspapers and periodicals to 'adhere to the rule that on no account should a practitioner's name be published in any connection (save his decease) in the lay press without his personal and specific approval'.

Where exactly does Mr. Crawshaw find this rule, or is it perhaps a suggestion of his own? I have only been able to trace a reference in the South African Medical and Dental Council rules regarding conduct of which the Council may take cognisance, rule 1. Advertising, paragraph 2: 'Advertising in the lay press, or by broadcasting: arranging or inspiring or permitting reports, interviews, articles or notices of any description referring to himself in a manner calculated to attract patients'.

Professor Elliott² in his fine book on 'Medical ethics' takes a broad view in interpreting the International Code of Medical Ethics and the South African Medical Council ethical rules, for he says: 'A doctor in private practice may ethically grant an interview on a non-medical matter. Thus a medical President of a Music Society or a Rugby Union may grant an interview on a musical or rugby matter respectively, provided the interview does not constitute advertising in a professional sense'—presumably in a manner calculated to attract patients.

Perhaps Mr. Crawshaw is not connected with a Rugby Union or musical, philatelic or other public society, for he would then know full well of the use made by the Press of his name without his sanction.

Let us not carry this simple matter to absurdity, and let us not tie the hands of the Press by Mr. Crawshaw's rigid suggestions that on no account should a practitioner's name be mentioned in any connection . . . As long as there is no attempt at professional gain, or to attract patients, there does not appear to be anything preventing the Press from the free use of a practitioner's name on any non-medical matter, without having to wait for his obituary notice.

A. D. Bensusan

7 St. Paul's Rd.
Johannesburg
21 March 1956

1. Crawshaw, G. R., (1956): S. Afr. Med. J., 30, 284.
2. Elliott, G. A., (1954): *Medical Ethics*. Witwatersrand University Press vi. 27.

BLOOD TRANSFUSION REGULATIONS

To the Editor: We understand that in the near future the Minister of Health proposes to introduce regulations governing blood transfusion services throughout the Union. If this is so, we beg leave to raise in your columns the pressing question of the part played by the Native in donating blood to his own people. Our experience is limited to Natal, but we have reason to believe that elsewhere in the Union the position is not markedly different.

In 1955 our findings were as follows: The local blood transfusion service collected a total of 2,247 pints of blood, of which only 110 pints were donated by Asiatics and only 50 pints by Natives, i.e. 2% of the total blood collected was donated by Natives. Further, it was found that at least 70% of the total blood donated was used in the treatment of Natives. Even this amount fell far short of the quantity required and we were obliged on frequent occasions to obtain blood from outside sources.

It is our opinion, that the only way to maintain adequate supplies of blood for the Bantu patient is to increase greatly the amount donated by the Natives themselves. To achieve this, we firmly believe that the donors should be paid. All other means have failed, and we have the precedent of the Gold Mining Companies in this country who have proved that a successful blood-transfusion service can be maintained by the system of paying Native donors.

It may be argued that payment of blood donors is morally wrong. If so, then we feel that it is equally wrong for blood transfusion services to sell blood at a profit and for certain individuals concerned with these services to receive payment for work done.

Finally when we ask the Native to donate a pint of blood, we should remember that in order to make good the plasma protein lost in that pint, the individual must expend at least 20s. on protein foodstuffs. Is this not a reason in favour of the donor receiving some compensation for blood freely given?

D. M. Lithgow, W. R. Phillips, J. D. Woods

Edendale Non-European Hospital
Pietermaritzburg
14 March 1956.